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## A. INTRODUCTION

InstantAtlas™ is award-winning software for publishing eye-catching, stand-alone, dynamic web reports that make the regional and local patterns in your data easy to see. You can create interactive atlases, dashboards, profiles, or key indicator reports that allow information professionals, analysts, policy advisors and management executives to view and explore patterns, monitor key indicators, present trends and support decision-making. For more information about InstantAtlas dynamic reports, please visit [www.instantatlas.com](http://www.instantatlas.com).

Please read the InstantAtlas Getting Started Guide prior to reading this document. You can find this in the 'documentation' folder created during the installation of your InstantAtlas software. The default location for this is the following:

C:\Program Files\GeoWise\InstantAtlas\documentation



## B. THE INSTANTATLAS DESKTOP PUBLISHER

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## B.1. About this Section

The InstantAtlas Publisher is a tool for creating InstantAtlas stand-alone, dynamic reports. Once installed on your computer, it allows you to create a report with the template and the geographies of your choice. The Publisher is a wizard style application. Each screen has a 'Next' and a 'Back' button to allow you to step both forwards and backwards through the Publisher. The Publisher remembers the selections that you make on a particular screen to save you time when you next publish a report.

## B.2. Publisher Fundamentals

### B.2.1. Starting the Publisher

You can start the Publisher by clicking 'InstantAtlas Desktop Edition', 'InstantAtlas Publisher' in the Windows Start menu or by clicking the 'InstantAtlas Publisher' icon on your desktop (Figure 1).

Figure 1



If you chose not to create shortcuts during installation of the software, browse to the 'InstantAtlasPublisher.exe' file located in the 'InstantAtlas' folder created during the installation of your InstantAtlas software and double click it. The default location of the file is C:\Program Files\GeoWise\InstantAtlas.

### B.2.2. The File Menu

The 'File' menu at the top of the Publisher currently contains the options described below.

#### Open Project

Click this option to open an InstantAtlas project file. A project file contains information about your publishing session (e.g. the locations of the files you have uploaded and any settings you have typed in). It can be saved at any point during the publishing process (see below) and then opened during a future publishing session.

#### Save Project

Click this option to save an InstantAtlas project file. You can save a project file at any point during the publishing process. Normally you would do this at the end of the process when you have made all the changes you wish to save in the project.

#### Open ArcGIS Online Application

Please refer to section 'M.2.7. Opening an Existing Web Application' for specific information on this option. For general information on ArcGIS Online and InstantAtlas please read section 'M. The InstantAtlas ArcGIS Online Templates'.

#### Exit

Click this option to exit the Publisher.



### B.2.3. The Tools Menu

The 'Tools' menu at the top of the Publisher currently contains only one option.

#### Clear History

This option allows you to restore InstantAtlas Publisher to its default state and will take effect upon re-launching the application. It removes all your recently used files/settings from the drop down lists in the Publisher. Please note that clearing the Publisher's history cannot be undone. This option should therefore be used only if you have a serious problem using the Publisher and only after talking to your support provider.

### B.2.4. The Help Menu

The 'Help' menu at the top of the Publisher currently contains the options described below.

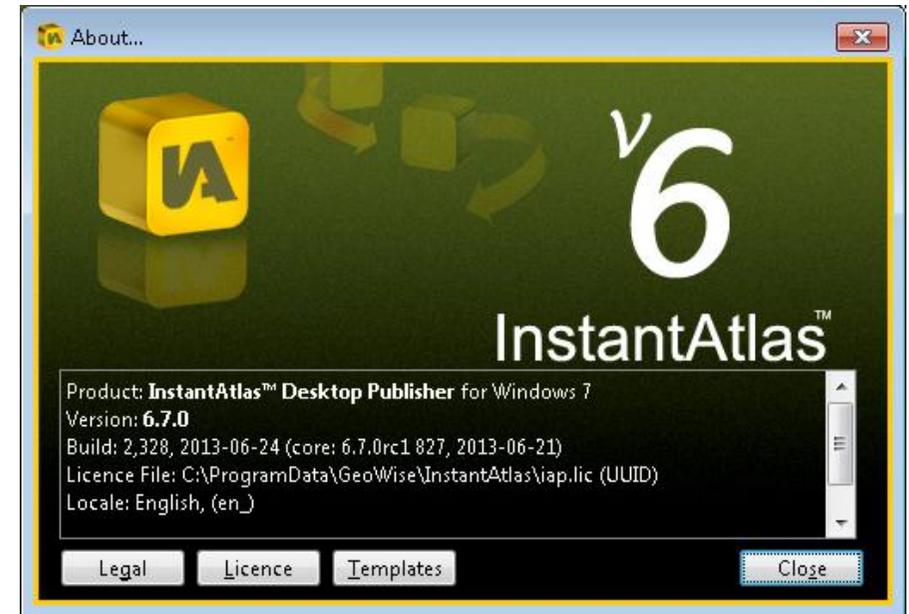
#### Help

Click this option to access the help pages for the Publisher.

#### About

Click this option to open the 'About' dialog (Figure 2). The 'About' dialog contains information regarding your Publisher application, including the version number and the location of your licence file.

Figure 2



There are also three buttons linking to additional information. The 'Legal' button links to the InstantAtlas End-User Licence Agreement. The 'Licence' button links to 'Licence File Information', from which you can also upload a new licence file. The 'Templates' button links to an overview of available templates and also allows new templates to be uploaded.

### B.2.5. User Interface Language

The default language for the interfaces of the InstantAtlas tools (Publisher, Designer and Style Editor) is UK English. However, a number of language packs are available and these allow you to display different languages in the interfaces. The US English language pack is automatically added to your computer when you install InstantAtlas. French, German and Spanish language packs are also available for installation on a pack-by-pack basis.



You can choose which packs are installed by choosing an Advanced Install when you install InstantAtlas. You can add or remove packs at any point by modifying your InstantAtlas installation. To do this, access the list of installed programs via the Control Panel, select InstantAtlas and click Change.

You can control the user interface language using the Publisher configuration file (see section 'B.4. Publisher Configuration File'). If no setting exists in this file, the software will detect the regional setting of your operating system. If the language pack matching your regional setting is not installed, the software will default to UK English. You can change the regional setting of your operating system using the Control Panel.

## B.3. Publishing a Report

The Publisher leads you through the steps required to create a dynamic report. The following sections provide information concerning each screen. Each screen has a 'Help' button that you can click if you wish to access the relevant Help page. You can access the options on each screen by clicking them using your mouse. The 'Tab' button on your keyboard can be used to cycle through available options on a screen.

### B.3.1. Choose a Template

The first step in the publishing process involves choosing a template. Every InstantAtlas dynamic report is based on a template. A template dictates the core appearance and functionality for a report.



Most of the InstantAtlas templates exist in Flash and HTML Editions. Generally the information given in this guide will apply irrespective of the selected template. Wherever there are differences between Flash and the HTML templates, the information about the HTML templates will be provided in green shaded boxes such as this.

Select a template from the drop down list. A screenshot and short description of the template will be displayed. If the template supports different languages, a 'Publish in' menu is available for selecting the language you wish to publish the report in. Click the 'Next' button.

### B.3.2. Choose Your Base Geography

#### B.3.2.1. Selecting a Layer

This step of the publishing process involves choosing a digital map file for the base geography for your report. A digital map file is simply a representation of geographic features in digital format (as opposed to a paper map for example). Base geography is defined as the set of geographic features that you wish to produce a thematic map for. For example, if you have crime statistics for community districts in New York and you wish to make a thematic map of these, the base geography for your InstantAtlas report will be New York community districts.

There is the option to publish a report with multiple base geographies. If you would like more information on this please refer to section 'H. Multiple Geography Reports'.



Digital map files come in a number of different formats, three of which are supported by the Publisher:

1. ESRI shapefile
2. MapInfo interchange file
3. MapInfo Table Structure file

ESRI shapefiles have a .shp file extension (e.g. districts.shp). MapInfo interchange (also referred to as MID/MIF) files have a .mif file extension (districts.mif). MapInfo table structure files have a .tab extension (districts.tab). All are accompanied by supporting files. You must have a digital map file in one of these three formats to be able to publish a dynamic report.

The supporting files required will depend on which file format you have your digital map data in. For ESRI shapefiles you will also need a .dbf file with the same name as the .shp file (districts.dbf) For MapInfo interchange files you will need a .MID file with the same file name as the .MIF file (districts.MID). Finally for MapInfo TAB files, you will need a number of additional files with the same filename but with the following extensions: .DAT, .ID, .MAP and .IND. These files need to be located within the same folder as the digital map files. Please note that all digital map files may be supplied with other supporting files not listed here – the extensions listed are the only ones explicitly required for use with the InstantAtlas Publisher. If you do not have digital map files for your geographies of interest, please contact your support provider.

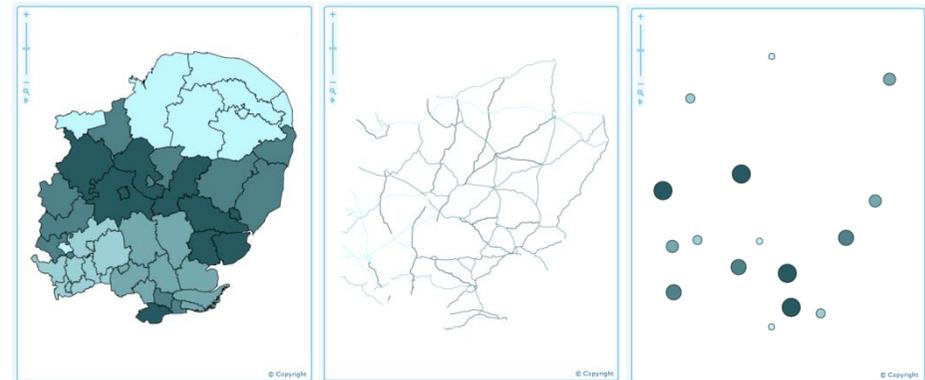
Digital map files can be classified according to the geometry of the geographic features they describe:

1. Polygon (e.g. the boundaries of New York boroughs)
2. Lines (e.g. the Canadian rail network)
3. Points (e.g. cities in Scotland)

The Publisher supports the upload of digital map files of all three geometry types listed above. The geometry type of the digital map file you choose for your base geography dictates how the map(s) in your published report will look.

Figure 3 illustrates how the map of your dynamic report will look if you publish using polygon, line and point digital map files as base geography respectively.

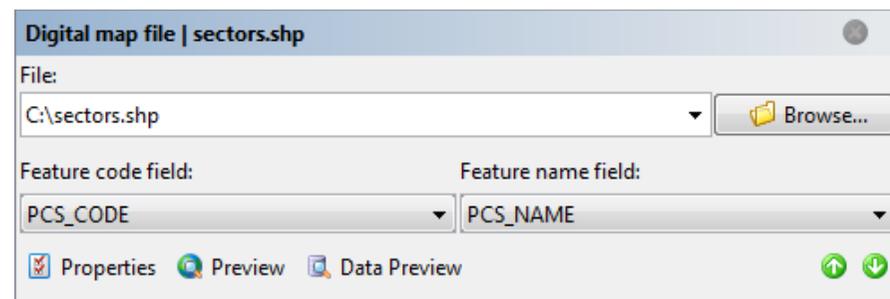
Figure 3



Digital map files can have different geographic coordinate systems. The Publisher will accept digital map files with any geographic coordinate system. If you publish a report and the geography in the map looks distorted you need to check the projection of your map files. If you need help with this, please contact your support provider.

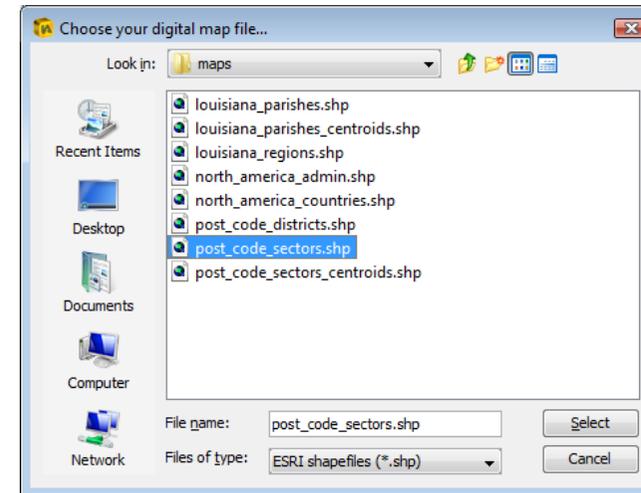
You can type the pathname to a digital map file into the 'File' box. For example, you might type 'C:\sectors.shp' to select an ESRI shapefile called 'sectors.shp' located on the C: drive of your computer (Figure 4). You can also access a drop down list by clicking the arrow to the right of the 'File' box. This will list the most recently used digital map files and digital map files saved in the 'maps' folder of your InstantAtlas software.

Figure 4



Alternatively, click the 'Browse' button to search for a digital map file located elsewhere on your computer or network. This will open the 'Choose your digital map file' dialog (Figure 5). You can change the file type you are browsing for using the 'Files of Type' list at the bottom of the dialog.

Figure 5



 If the size of your map file exceeds 1 Megabyte (MB) the Publisher will warn you due to the possible negative impact on the performance (loading and response time) of your dynamic report. There are two interrelated reasons why the size of your map file might be large:

1. The features in your map file are very detailed
2. The number of geographic features in your map file is large

If the features in your map file are very detailed you can generalise (or simplify) them. You can remove nodes to reduce the detail of lines, merge geographic features, convert polygons to points, etc. If you need help to generalise your map files, please contact your support provider.

If the number of features in your map file is large you should consider publishing only a selection of the available features. It is difficult to specify a maximum number of base geography features because performance is



ultimately a combination of many factors (such as the number of indicators included in the XML data files, the speed of an Internet connection the report is viewed over, the performance of the computer used to view the report, etc.). The guideline upper limit is 10,000 features but the only way to be sure whether the report will perform acceptably is to test this with your own data/Internet connection/computer/etc.

A digital map file not only stores the geometry of geographic features but also the attributes of each feature. These attributes are held in one or more fields, or columns, within the map file. To be used in InstantAtlas, your ESRI shapefile or MapInfo interchange or TAB file must have a field that contains codes identifying the geographic features. It should also have another field that contains the names of the geographic features if these are different from the codes.

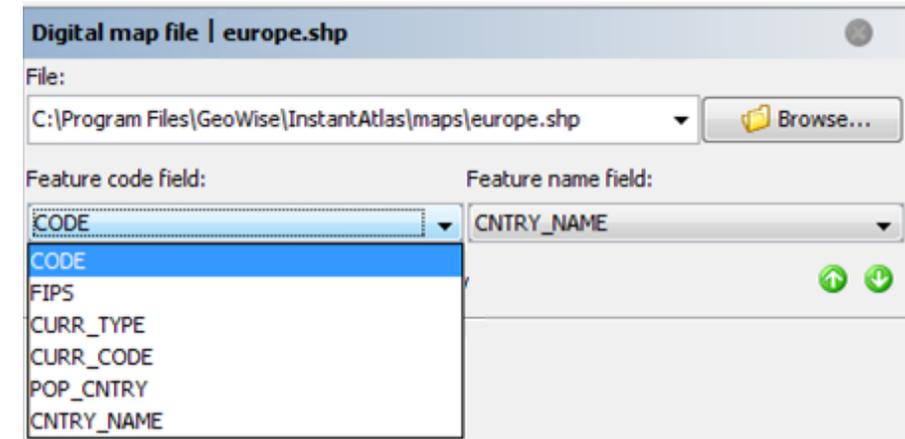
For example, if you have a digital map file with the boundaries of post code sectors in Edinburgh (UK) it might contain two fields like this:

CODE	NAME
EH111	Sector EH11 1
EH112	Sector EH11 2
EH113	Sector EH11 3
EH114	Sector EH11 4
etc.	etc.

The Publisher will list all the available fields in the digital map file you have uploaded in the 'Feature code field' and 'Feature name field' drop down lists. In the example shown in Figure 6 the map file has six fields. Note

that the names of fields in your map file can be anything. The name of the field is not important – it is the contents that are important.

Figure 6



In the 'Feature code field' drop down list select the field containing codes. Every feature must have a code in this field. The code for each feature must be unique. The Publisher will warn you (when you click the 'Next' button) if the field you have selected is not suitable. The field chosen must contain the codes of any features that will be used in the data file for your report.

In the 'Feature name field' drop down list select the field containing names. These names will be displayed in your report if you choose to publish with dummy data. However, if you do not have a suitable name field in your map file, simply select the same field as that selected in the 'Feature code field'. You will be able to specify different names for geographic features in the data file(s) for your report (see section 'E. The InstantAtlas Excel Data Manager' for more information on entering names).

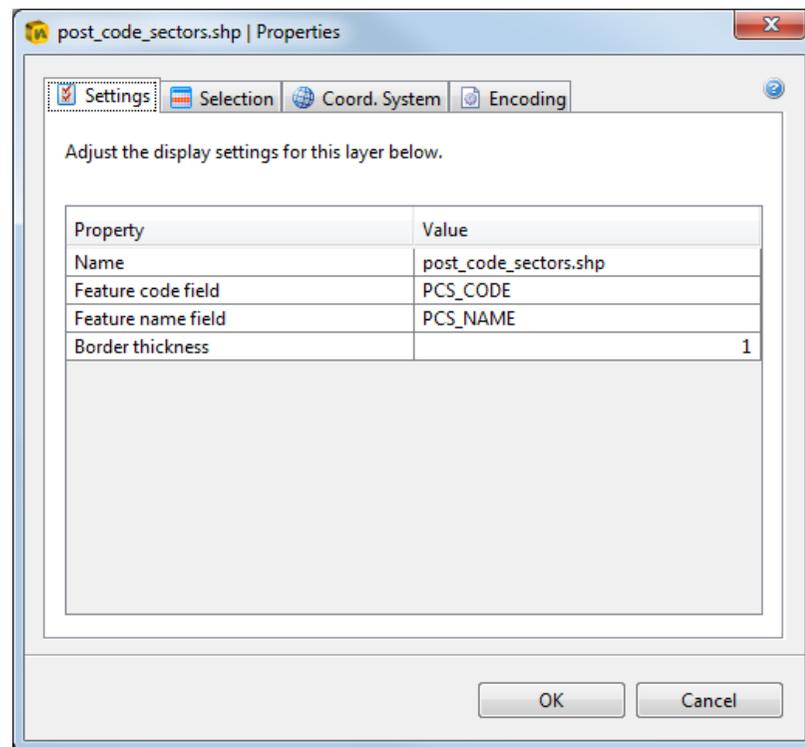


If you are happy with your selections, you can now click the 'Next' button. Alternatively, you can click the Properties or Preview buttons.

### B.3.2.2. Layer Properties of Base Geography Layers

Click the properties button to view the properties for the layer. The 'Layer Properties' dialog will open (Figure 7).

Figure 7

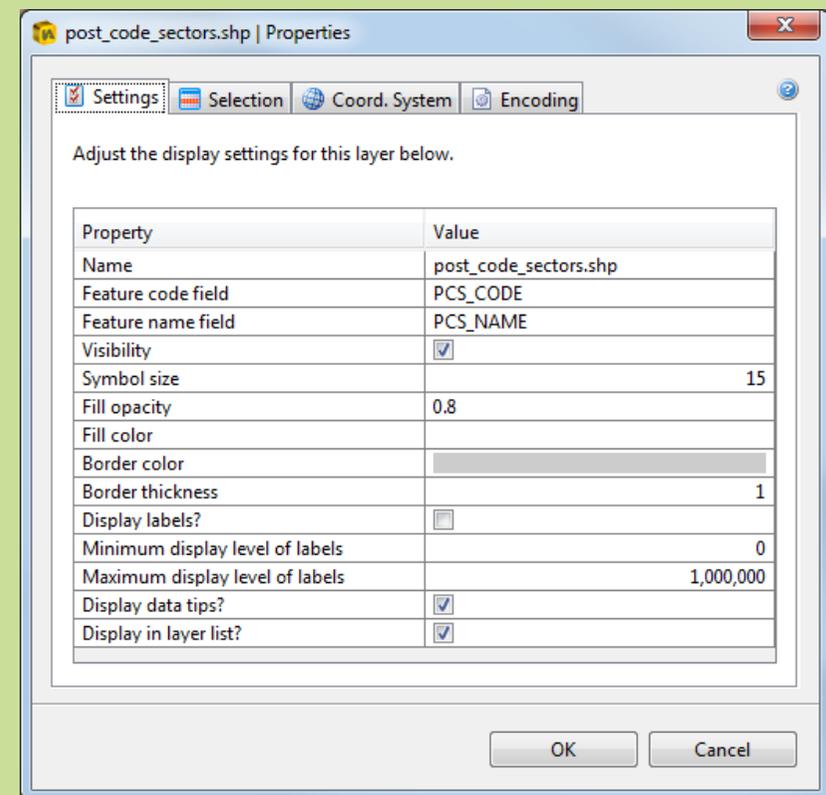


The 'Settings' tab allows you to change the name of the layer for display in the final dynamic report as well as the feature code and name fields. You

can also edit any other properties listed. Hold your mouse pointer over the name of the property to see a longer description.

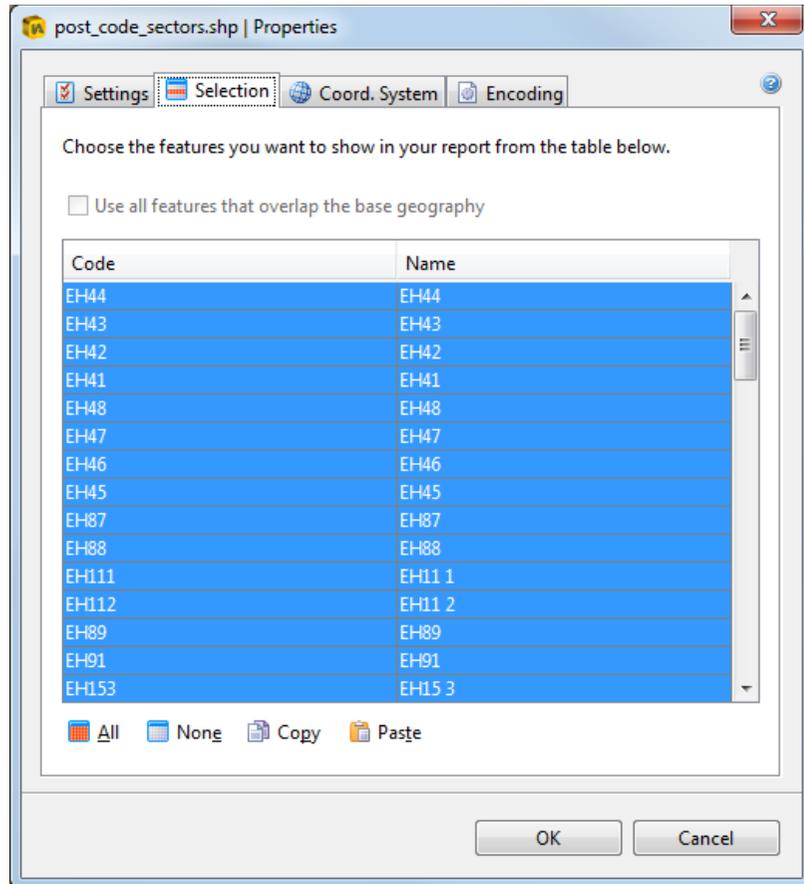
When using an HTML template you will see many more layer properties (Figure 8). If you wish to change these settings, it is advised that you adjust them here in the Publisher even though it is also possible to change them after the publishing process by editing the map.js file in a text editor.

Figure 8



The 'Selection' tab allows you to select a subset of the geographic features in your map file (Figure 9).

Figure 9

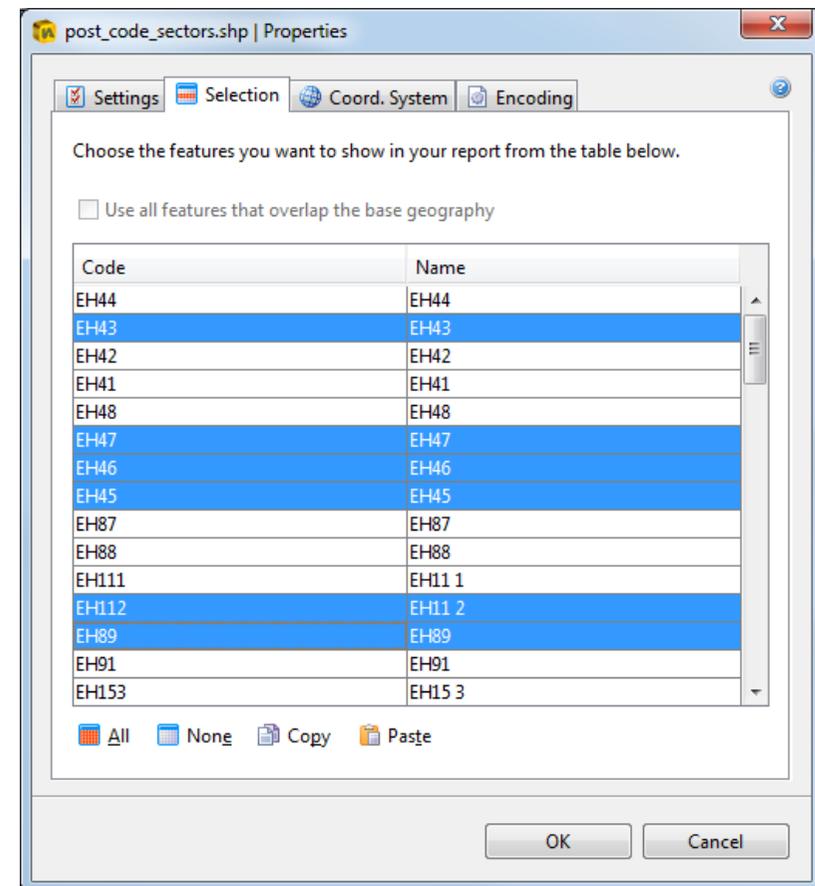


The contents of the fields you have selected will be displayed in the Code and Name columns in this dialog. You can click the column headings to sort the contents in ascending or descending order. You can also click and drag the divider between the two columns to change the width of the

columns. By default all features are selected. This means that all the geographic features in your map file will be published in the report.

If you wish to publish a subset of the geographic features only, you can select or deselect features in the table (Figure 10). Hold down the 'Ctrl' button on your keyboard while you click to make multiple selections or deselections. Use the 'All' or 'None' buttons to highlight all or no features respectively.

Figure 10



If you have a list of codes in another document (e.g. an Excel spreadsheet or a text file) you can copy and paste these into the Publisher to select your subset of geographic features. The codes in the list should be separated by a space or each on a new line (Figure 11).

Figure 11

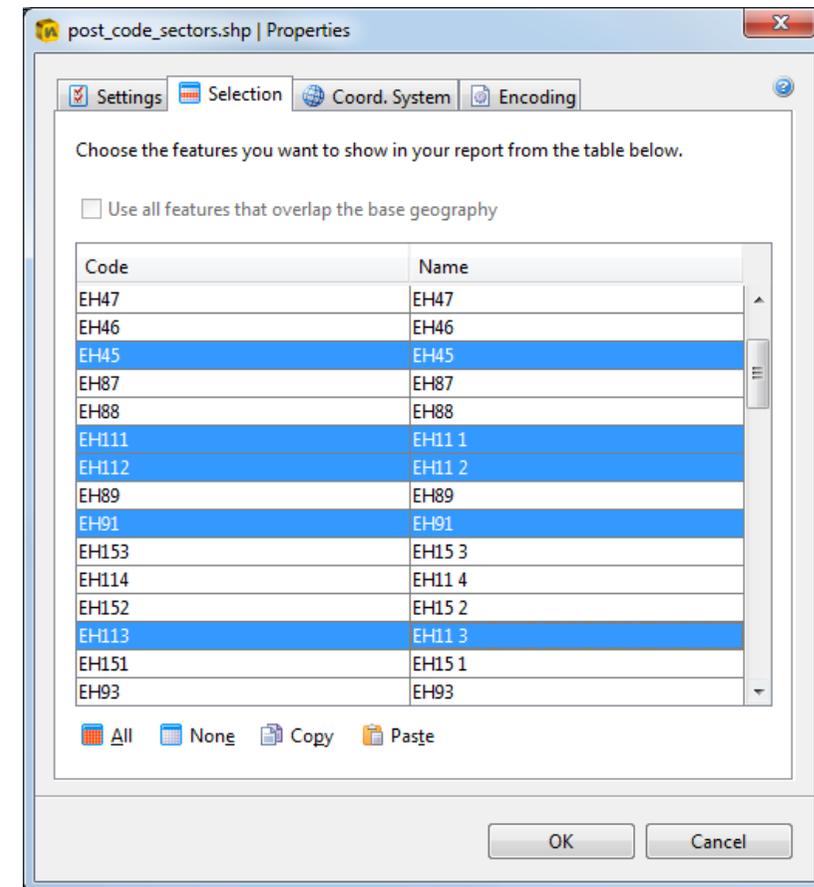
	A	B	C	D
1	EH91			
2	EH113			
3	EH112			
4	EH111			
5	EH45			
6				

The steps are the following:

1. Open the document containing your list of codes
2. Select the codes and copy them (Ctrl-C)
3. In the 'Selection' dialog of the Publisher, click the 'Paste' button

Any features with codes that exactly match those in your list will be automatically selected (Figure 12).

Figure 12

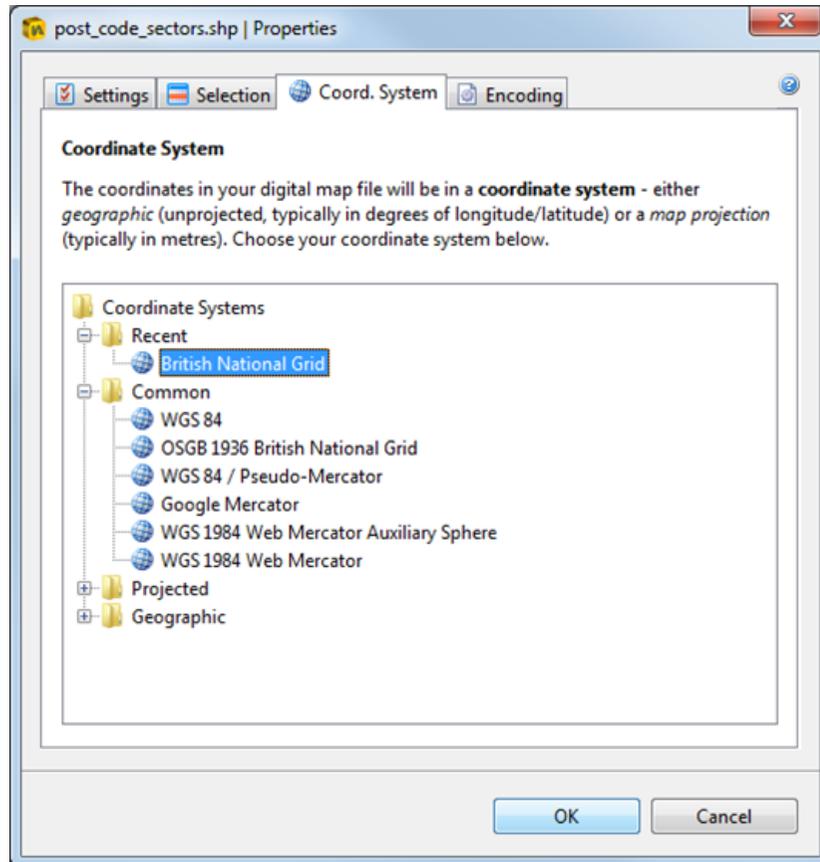


The 'Coord. System' tab allows you to select the coordinate system of the map layer. This is important if you want to add a WMS background layer, an ArcGIS Online / ArcGIS Server background layer or a Google Maps background layer into your report and use the Publisher to re-project your map files into the projection of the background layer (for more information about background layers please refer to section 'B.3.5 Choose Your Background Images'). If you are using a shapefile that has a .prj file



associated to it, the Publisher will pick up the coordinate system out of the .prj file automatically. If your shapefile does not have a .prj file or if you are working with MapInfo MID/MIF or TAB files, you will need to specify the coordinate system your map data is in (Figure 13).

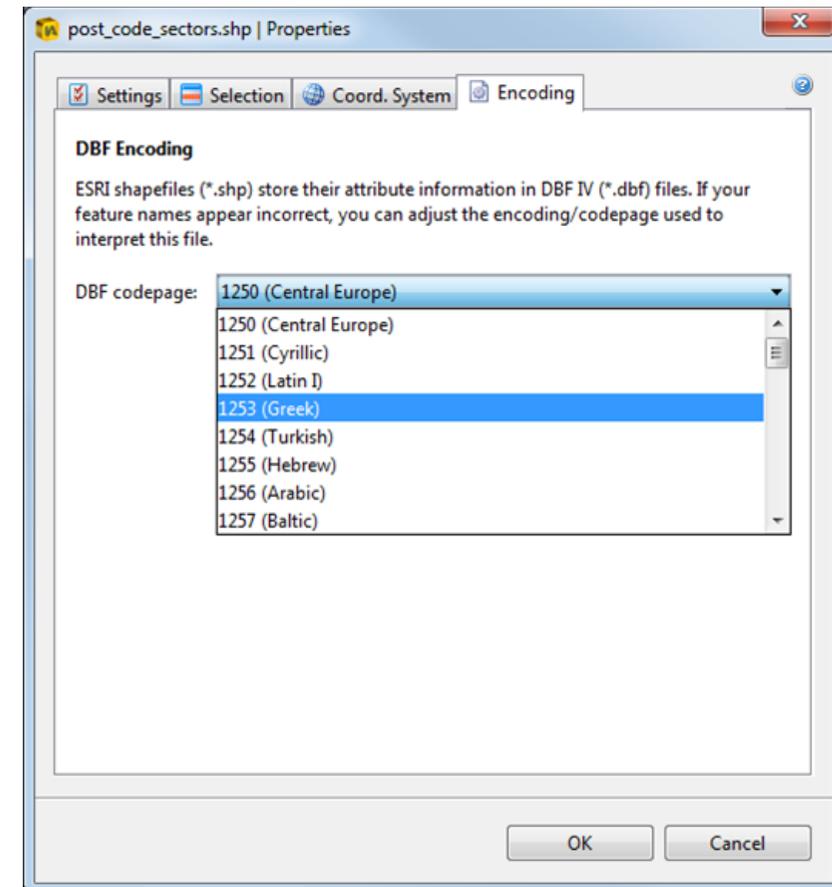
Figure 13



The 'Encoding' tab allows you to change the encoding setting for a DBF IV file (Figure 14). You only need to do this if you are using an ESRI shapefile (.shp) as your digital map file and the names of your geographic

features are being displayed incorrectly in the dynamic report you publish. If this is the case, you can choose a more suitable encoding.

Figure 14



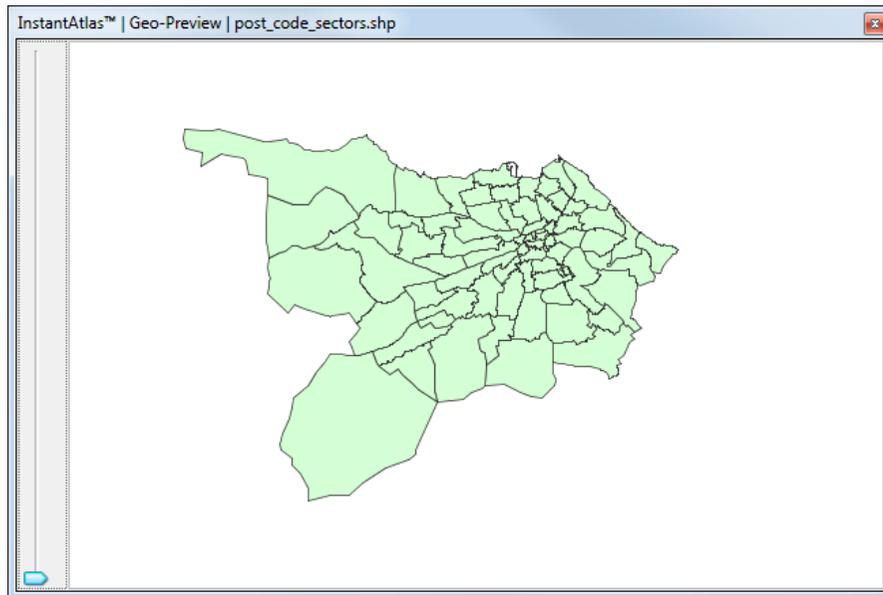
When you are happy with the properties for your layer, click the 'OK' button. Alternatively, click the 'Cancel' button to cancel any changes.



### B.3.2.3. Geo-Preview and Data Preview

You can click the 'Preview' option for the layer if you wish to preview the geographic features you have chosen to publish. A new window will open showing your selection (Figure 15).

Figure 15



Click the 'Data Preview' option to see a simple table with all available attribute fields and their content. This can be helpful when choosing suitable code and name fields (Figure 16).

Figure 16

 A screenshot of a software window titled "UK\_EURO\_GOR\_G100.shp | 1st 100 Features | Preview". The window displays a table with the following columns: AREA, CODE, UNIT\_ID, DESCRIPT1, NAME, FILE\_NAME, and N. The table contains 10 rows of data representing different geographic regions.
 

AREA	CODE	UNIT_ID	DESCRIPT1	NAME	FILE_NAME	N
54488.462	K	41427		South West	SOUTH_WE...	1
31922.783	J	41421		South East	SOUTH_EA...	1
2130.017	H	41428		London	LONDON_E...	1
47920.283	G	41425		East of England	EASTERN_E...	1
0.0	F	41426		West Midlands	WEST_MIDL...	1
18415.089	E	41423		East Midlands	EAST_MIDL...	1
15261.626	D	41430		Yorkshire and The Humber	YORKSHIRE...	1
79176.52	B	41431		North West	NORTH_WE...	1
8386.095	A	41422		North East	NORTH_EA...	1
48384.142	924	41424		Wales	WALES_EUR...	1
139314.794	923	41429		Scotland	SCOTLAND...	2

### B.3.3. Choose Your Data

The indicator data, or statistics, displayed in an InstantAtlas Flash dynamic report are stored in one or more data files in XML format (.xml). XML stands for Extensible Markup Language and is a flexible format for storing, structuring and publishing information.

For the HTML templates the indicator data needs to be in JSON format. JSON stands for JavaScript Object Notation. The usual filename extension for JSON files is .json. However, JSON files within InstantAtlas have the file extension .js to ensure that the files are recognised by all Web Servers.

These data files are generated using your InstantAtlas Data Manager. The 'Choose Your Data' screen of the Publisher gives you the option to upload a data XML file for the report you are publishing. If you have not yet



created a data file, the Publisher can create demonstration data files for your report. Alternatively, you may use information stored in your digital map file to create a data file (Figure 17).

Figure 17

### B.3.3.1. Create a Demo Data File

If you have not yet created a data file for your report and wish to create one at a later stage, click the 'Create a demo file' radio button. The Publisher will publish your report with demonstration data files containing arbitrary data values. A data file can later be created from your Excel or Access Data Manager and exported directly into the dynamic report folder.

### B.3.3.2. Upload a Data XML File

If you wish to upload a previously created data XML file for your report, click the "Use an InstantAtlas data.xml file" radio button. Type the

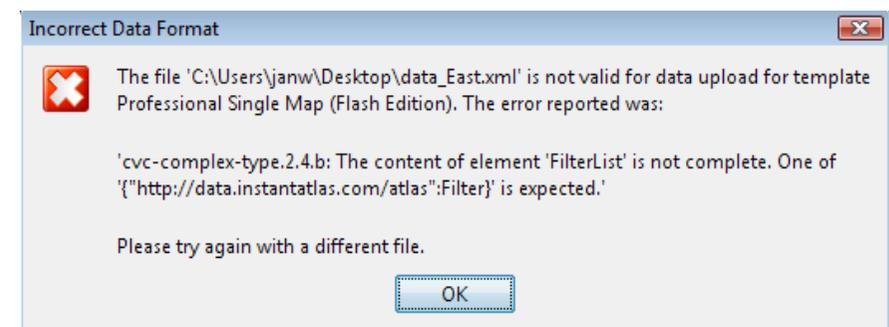
pathname to your data file into the box (e.g. 'C:\Documents and Settings\username\Desktop\data.xml'). Alternatively, click the 'Browse' button to browse for a data file. This file will typically be called 'data.xml' as this is the default name given by the InstantAtlas Data Manager (Figure 18).

Figure 18

The 'data.xml' file may have supporting theme XML data files (please refer to section 'E. The InstantAtlas Excel Data Manager', sub-section 'E.7. Exporting Data Files' if you are not clear on the reason for this). If this is the case, the supporting files must be located in the same folder as the 'data.xml' file you upload. If they are not located in the same folder, the Publisher will not be able to publish your report correctly.

If the XML file you have uploaded is not valid, you will see a warning like that shown in Figure 19.

Figure 19



The most likely reason is that you have created the XML data file using an incorrectly formatted Excel workbook. You should check the workbook you used to generate the file and refer to section 'E. The InstantAtlas Excel Data Manager' for the rules on entering data. The error message in the dialog should give an indication of where the problem lies. For example, the error message in Figure 19 states that the content of element 'FilterList' is not complete so you should check the formatting of any filter columns you have added in your workbook.

It is currently not possible to upload a data.js file for use with the HTML templates. You can, however, upload a data file in XML format which will be transformed into a data.js file during the publishing process.

### B.3.3.3. Create a Data File from a Digital Map File

If you wish to use the attribute data stored in your digital map file, click the corresponding radio button. Note that you cannot use this option if the report you are publishing has two or more base geographies.

Before you read on, please ensure that you have an understanding of the general use and purposed of themes, indicators, dates, associates and metadata within an InstantAtlas data file. Section 'E. The InstantAtlas Excel Data Manager' provides detailed information about these topics.

If you have not yet defined a data model for your shape file, selecting the 'Create data file from digital map data' radio button will automatically launch the 'Organise Data' window (Figure 22), which you can use to create and manage your data model.



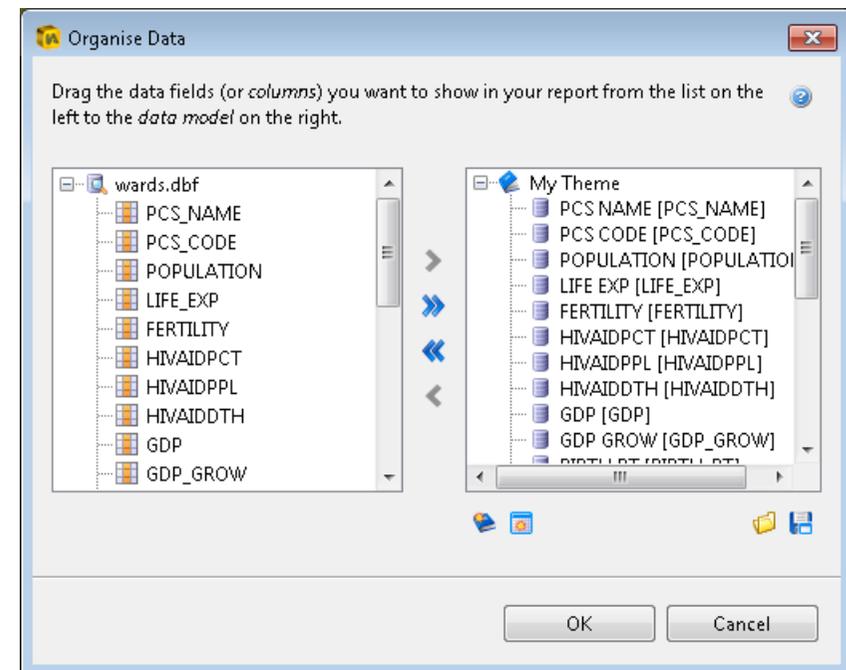
Please note that this functionality currently doesn't allow you to define filters or metadata links for geographic features. If you would like to use either or both of these functionalities in your data file you should use the Excel or Access Data Managers.

Available data fields (or columns), taken from your digital map file can be found in the left hand pane, while your data model is shown on the right.

### The Data Model and Its Elements

By default all available data fields are added as indicators to one single theme called 'My Theme' with the names of the data fields used as indicator names (Figure 20). This is called the 'default data model'.

Figure 20



You can either modify the default data model or you can clear the current model using the  button to create a complete new model.

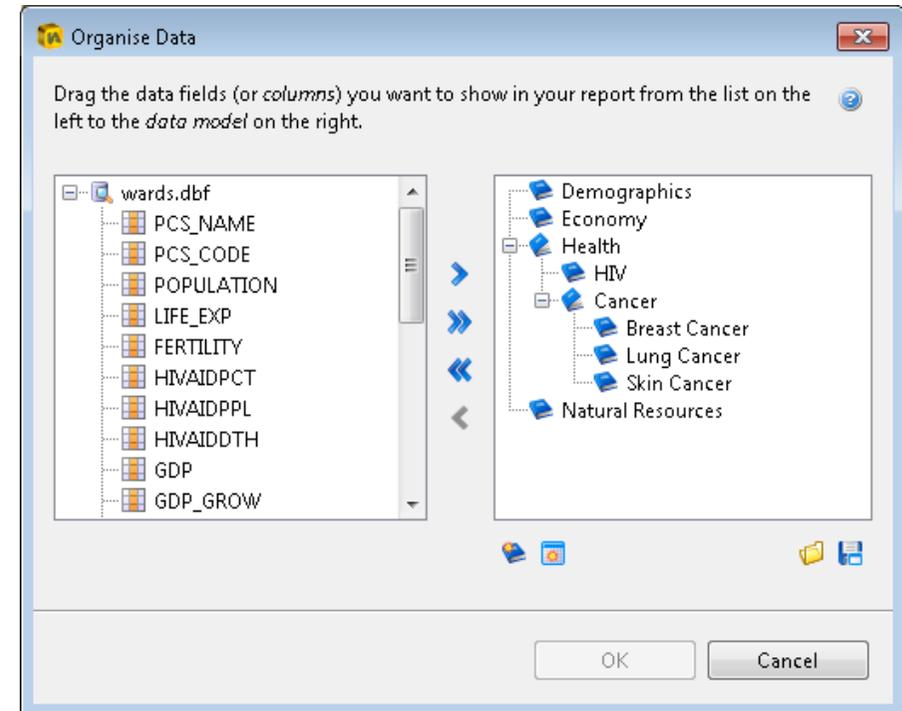
A valid data model is made up of one or more themes, to which indicators should be assigned. For each indicator you can define a date. Multiple indicators can be merged to create one single indicator with the same name and with multiple dates. It is also possible to assign associates to each indicator or date.

### Themes

A theme can be created by clicking the  button. You will be asked to enter a name for the new theme. After the theme is created you can change its name through the 'Edit Theme' dialog. This dialog can be accessed by right-clicking on the theme and selecting 'Edit' from the context menu.

If an existing theme is selected when you click the button to create a new theme, the Publisher will create this new theme as a sub-theme (or child) of the selected theme. If no theme is selected, the new theme will be added to the root of the data model. When building your data file using the data model tool you can have as many levels of subthemes as you like. You are not restricted to a hierarchy of three levels (themes, indicators and dates) as is the case when using the Excel or Access Data Managers. Figure 21 shows an example of a possible theme structure.

Figure 21



### Indicators

When you have created and renamed your themes you may add indicators to these themes. Select the theme of your choice in the right hand pane and then select the indicator you wish to move across to this theme from the list of available indicators in the left hand pane. Data columns can be moved between panes using the arrow buttons, either as individual selections  or all at once . Alternatively you can also drag and drop indicators from the list of data fields from the left hand side into a theme on the right.

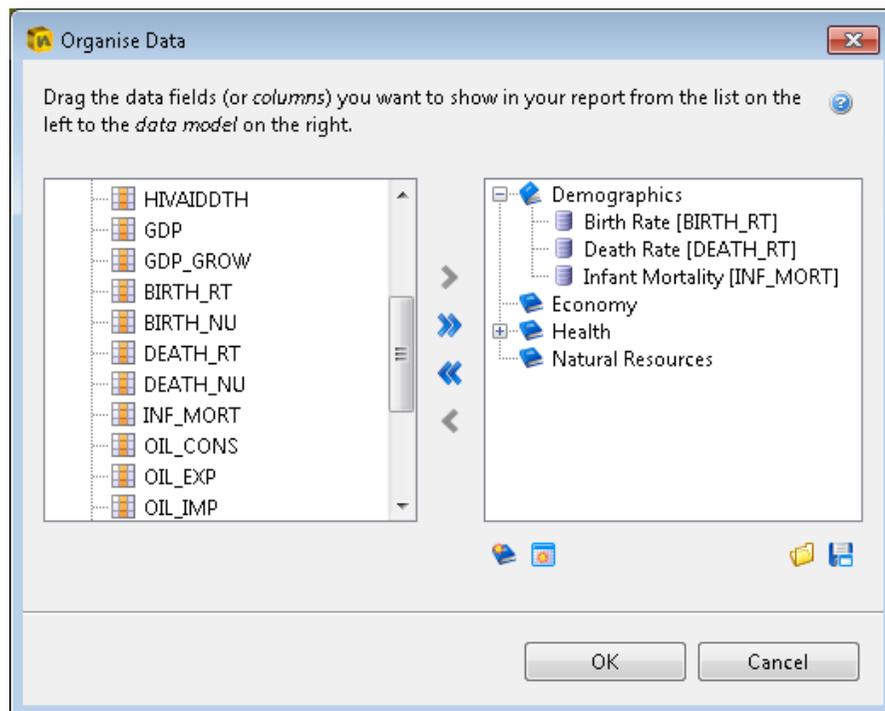


Using the  button you can remove single selected indicators from the data model. The button  removes all indicators from the data model and leaves only the themes.

In the Properties dialog you can rename your indicators and change other settings; all of which are detailed later in this chapter in section 'The Properties Dialog of Indicators, Dates and Associates'.

Figure 22 shows that three indicators have been added to the 'Demographics' theme and were renamed for better readability.

Figure 22



## Dates

Dates are treated as special types of indicators (those with a date assigned to them). You can enter a date for an indicator through the Properties dialog which can be accessed by either double-clicking on the indicator or right-clicking and then selecting 'Edit' from the context menu). This will create a single date for the indicator.

## Multiple Indicator Dates

There are three ways to create a multiple time series for an indicator:

The first way to create multiple dates for an indicator is by merging multiple indicators within the same theme. You can access this option by highlighting the indicators you wish to merge, then right-click to open the context menu and select the 'Merge Indicators' option. All highlighted indicators will be merged, meaning they will get the same name and ID as the top most selected indicator and their current names will become the dates.

A second way of creating multiple dates for an indicator is by renaming multiple indicators at the same time so that they have the same name. To do this, highlight the relevant indicators, then right-click and select the 'Edit' option. If you now change the name, it will apply this name to all selected indicators and therefore merge them to be separate dates of the same indicator. Their current names will become the dates.

A third way of creating dates is by adding data fields from the left hand side to an existing indicator in the data model on the right hand side. You will be asked if the field(s) shall be added as dates or as associates to the

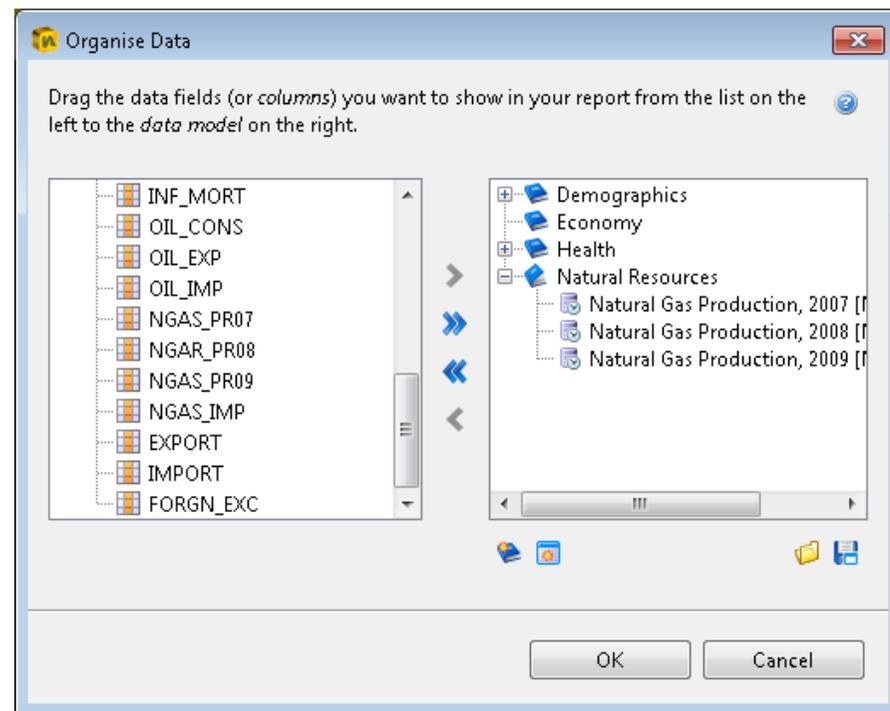


selected indicator. When added as dates the existing indicator will also become a date along with the field(s) you moved across. All will share the same indicator name (the one of the existing indicator) and the field names will become the dates.

You can rename your dates in the Properties dialog where you can also change further settings. Please refer to section 'The Properties Dialog of Indicators, Dates and Associates' for further information.

Figure 23 shows an indicator called 'Natural Gas Production' with three dates (2007, 2008 and 2009)

Figure 23



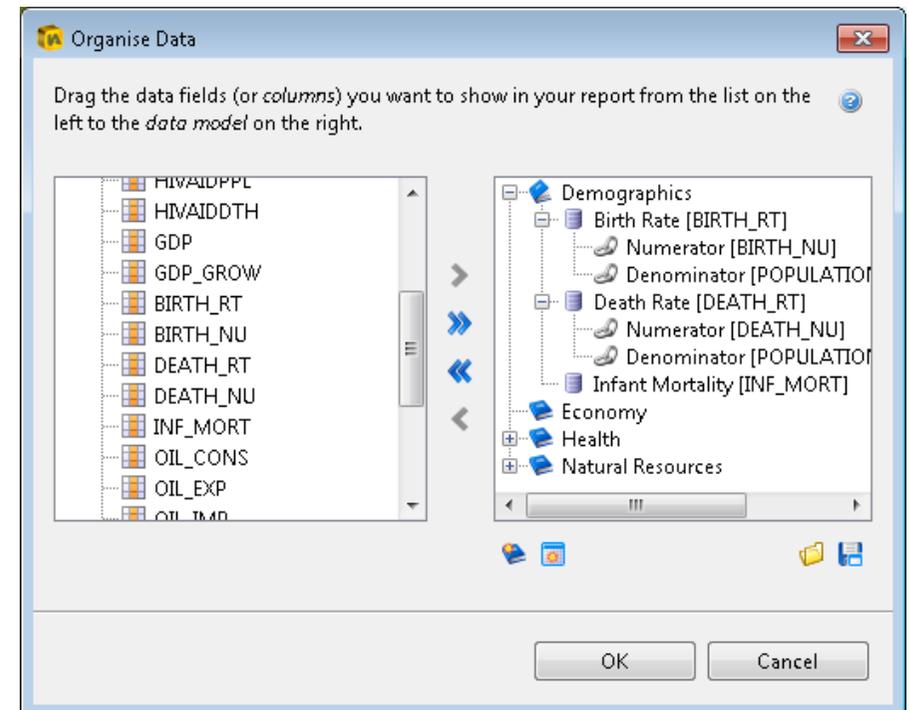
## Associates

Associates can be added to an indicator or a date by simply moving one or more data fields across from the left hand side to an existing indicator or date in the data model on the right hand side.

You can rename your associates in the Properties dialog where you can also change further settings. Please refer to section 'The Properties Dialog of Indicators, Dates and Associates' for further information.

Figure 24 shows that two associates called 'Numerator' and 'Denominator' have been added to each of the indicators 'Birth Rate' and 'Death Rate'.

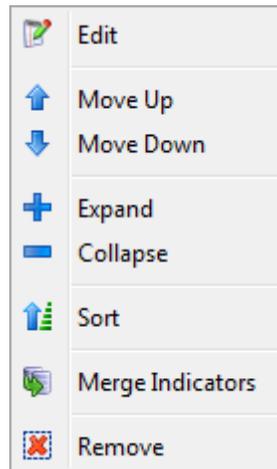
Figure 24



## The Context Menu of Data Model Elements

There are a number of options available in the context menu which appears when you right-click on any of the elements of the data model (Figure 25).

Figure 25



For themes, the 'Edit' option opens the 'Edit Theme' dialog which allows you to edit the theme name. For all other data model elements the 'Edit' option opens the 'Properties' dialog. Please refer to section 'The Properties Dialog of Indicators, Dates and Associates' for further information.

With the 'Move Up' and 'Move Down' options you can change the order of elements within the current hierarchy level of the current data model branch. This can also be done manually by dragging and dropping an indicator into position (only within the data model on the right-hand side).

Using the 'Expand' and 'Collapse' options you can expand/collapse themes to view or hide the indicator belonging to them. You can also

expand/collapse indicators to view or hide associates defined for the indicator(s).

The option 'Sort' only applies to indicators and allows you to sort any highlighted indicators alphabetically.

Using the 'Merge Indicators' option you can define the highlighted indicators to be different dates of the same indicator. They will each have the same indicator name and their current names will be used as the dates. This option is detailed in section 'Multiple Indicator Dates'.

To remove an element of the data model, select the 'Remove' option. If you remove a theme that contains indicators or an indicator with associates the containing elements ('child elements') will also be deleted.

## The Properties Dialog of Indicators, Dates and Associates

The Properties dialog of indicators, dates and associates allows you to modify their settings, such as the Name, Date Data Type and Metadata URL (Figure 26). Depending on the element type (indicator date or associate) some settings may be disabled. The fields 'Source' and 'Parent' cannot be edited and are for reference only. 'Source' shows the name of the original data field used. 'Parent' shows the indicator name that an associate belongs to.



Figure 26

Infant Mortality | Properties

Properties  Metadata

Name: Infant Mortality

Date: 2011

Data Type:  Numeric  Categorical

Metadata URL: <http://www.ons.gov.uk/ons/rel/vsob1/>

Source: INF\_MORT

Parent: <none>

OK Cancel

You can add Metadata settings for each indicator, date or associate on the 'Metadata' tab. The precision metadata property is already added to the list as it is treated differently in the data file than all other metadata properties. If you do not want to specify a precision for your data here, simply leave the value cell blank. You can add further rows by clicking on the  button or delete rows by using the  button. If you do not know the metadata properties that can be used and what kind of values are expected for each please refer to section 'E.6. The Metadata Worksheet'.

Figure 27 shows several metadata properties defined for the indicator 'Infant Mortality'.

Figure 27

Infant Mortality | Properties

Properties  Metadata

Enter any metadata for this indicator below. This can be used to adjust settings in the report, or simply to provide extra information for users.

Property	Value
Precision	2
customPalette	Sequential Green Yellow
customClassifier	equalInterval
metatext	Infant mortality is the d...

OK Cancel

When you have completed setting the Properties and Metadata click 'OK'.

### Saving the Data Model and Returning to the IA Publisher

When you are happy with the data model you have created you may wish to save it for future use. This can be done by clicking the  icon, which allows you to save your InstantAtlas data model as an XML file in a location of your choice. If you wish to load a previously created model, use the load  button to bring up a dialog from which you can choose the data model you wish to load.



Once you have created your data model and wish to return to the Publisher Wizard, please click 'OK'. Your data model will be checked to ensure it is valid before returning to the Publisher wizard screen.

Now click the 'Next' button or alternatively, click the 'Back' button to return to the 'Choose Your Base Geography' screen.

### B.3.4. Choose Your Contextual Geographies

This step of the publishing process involves choosing contextual geographies if these are required. Contextual geographies are displayed in dynamic reports to provide context to the map(s). They are not used for thematic mapping as this role is reserved for the base geography. You may choose multiple contextual geographies for your dynamic report if you wish.

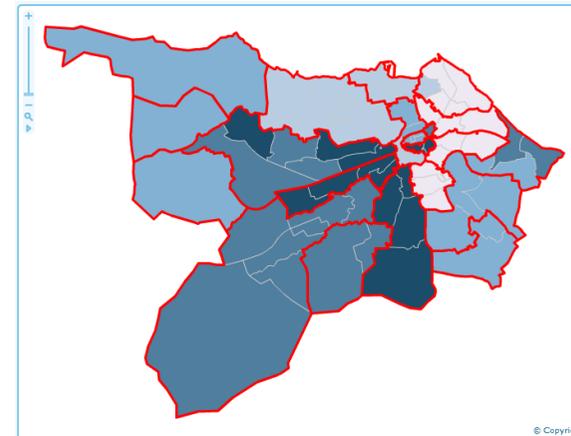
There are two types of contextual layers. You can either upload a digital map file into the Publisher or you can use a GeoRSS connection to feed the geographic features on-the-fly into your report (requires internet connection).

#### B.3.4.1. Digital Map Files as Contextual Layers

As with the base geography, digital map files should be uploaded in either ESRI shapefile (.shp), MapInfo interchange file (.mif) or MapInfo table structure (.tab) format.

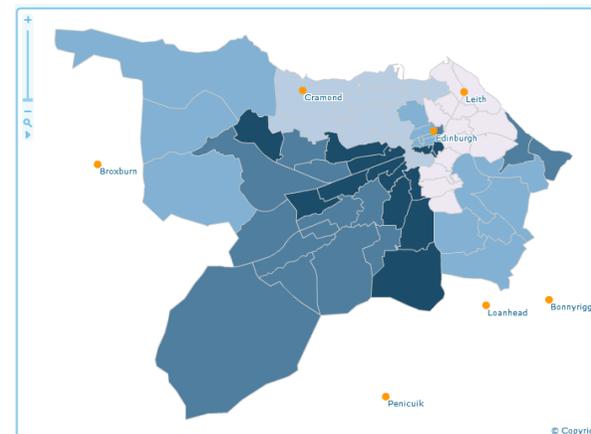
For example, you might wish to show district boundaries as an overlay to a base geography consisting of post code sectors. In Figure 28, the district boundaries have been set to be red and thicker than the sector boundaries (light grey).

Figure 28



You can upload digital map files of polygon, line or point geometry type. In Figure 28, a polygon type digital map file was uploaded as the contextual geography. Figure 29 shows an example of a point digital map file uploaded as a contextual geography.

Figure 29

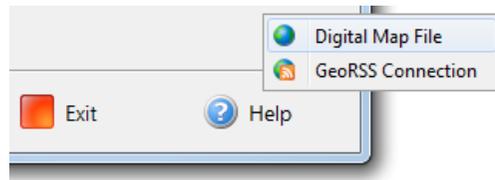


It is possible to show labels for contextual features – this process is described in section ‘C. The InstantAtlas Designer’ in sub-section ‘C.4.3.6. Map Properties’.

When using an HTML template you can show labels for contextual layers by ticking the ‘Display Labels?’ setting in the layer properties in the Publisher.

Click the ‘Add’ button and select ‘Digital Map File’ to add a digital map file for your contextual geography (Figure 30).

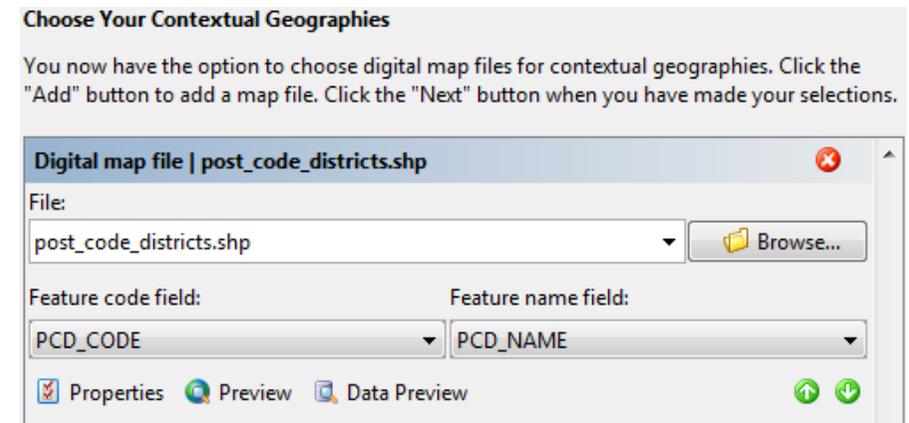
Figure 30



A new ‘Digital map file’ box appears (Figure 31). Type the pathname to a digital map file into the ‘File’ box or click the arrow to the right to access a list of recently used map files. Alternatively, click the ‘Browse’ button to browse for a map file on your computer or network. In the ‘Feature code field’ drop down list select the field containing codes. Currently, contextual layers are for context only and no data are matched to them so the codes you select are not critical (they could be the same as the names for example). They must be unique however and different from any codes used in the base geography or other contextual geographies.

In the ‘Feature name field’ drop down list select the field containing names. This should not contain any nulls.

Figure 31



The ‘Preview’ and ‘Data Preview’ buttons work in the same way as described in section ‘B.3.2.3. Geo-Preview and Data Preview’

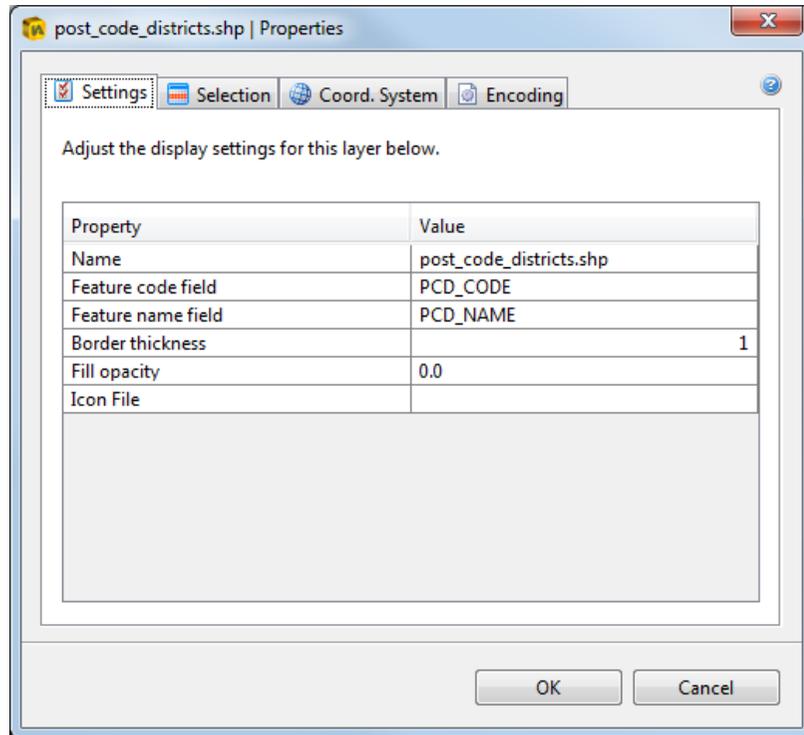
 The 1 MB rule that was described in section ‘B.3.2. Choose Your Base Geography’ also applies to contextual geography map files. Furthermore, the digital map files uploaded as contextual geographies should have the same geographic coordinate system as the digital map file uploaded as the base geography. If this is not the case, your contextual geographies may not appear in the published report. If the coordinate systems of your digital map file differ significantly, the Publisher will produce a warning after clicking the ‘Publish button’ at the end of the Publisher

#### ***B.3.4.2. Layer Properties of Contextual Geography Layers***

You can edit the layer properties by clicking on the ‘Properties’ button. In the ‘Settings’ tab, you can change the layer name as it appears in the report as well as the feature code and name fields. You can also edit any other properties listed (Figure 32).



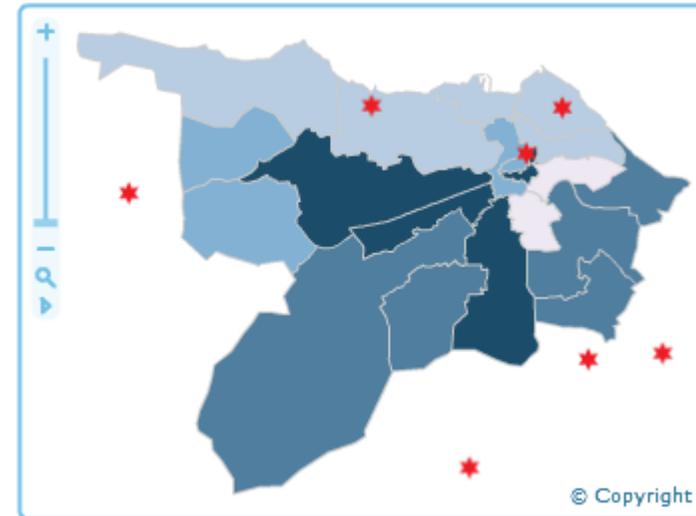
Figure 32



Fill opacity defines whether the centre of a layer has opaqueness or not, where 0 means complete transparent and 1 means complete opaqueness. By default, contextual layers are set to 0. For point layers in particular, you may want a value higher than 0 in order to see filled points instead of circles or 'hoops'.

If your contextual layer is a point layer you might also wish to upload an icon file which will be displayed in the map for each of the points. This icon replaces the default circle symbol (Figure 33).

Figure 33



Valid icon formats are JPG and PNG. If you would like to have a transparent background, you need to create a PNG file since the JPG format does not support transparency.

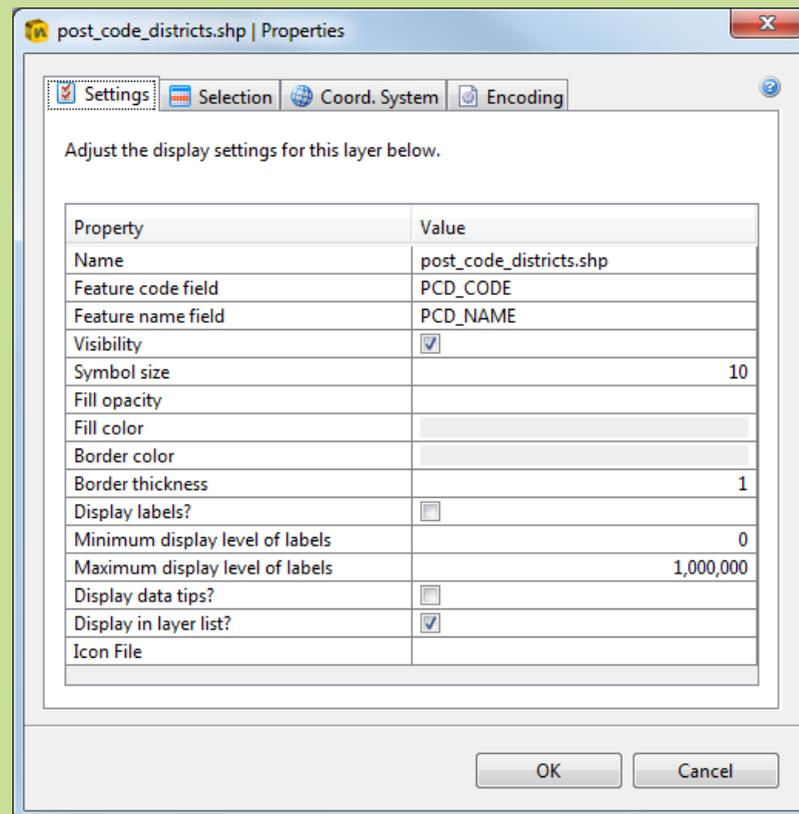
Some of the most common symbols in the different colours can be found in the installation folder of your InstantAtlas software, in a subfolder called 'icons'. The default location for this is:

C:\Program Files\GeoWise\InstantAtlas\icons\.

For line or polygon contextual layers the Icon File property should be left blank.

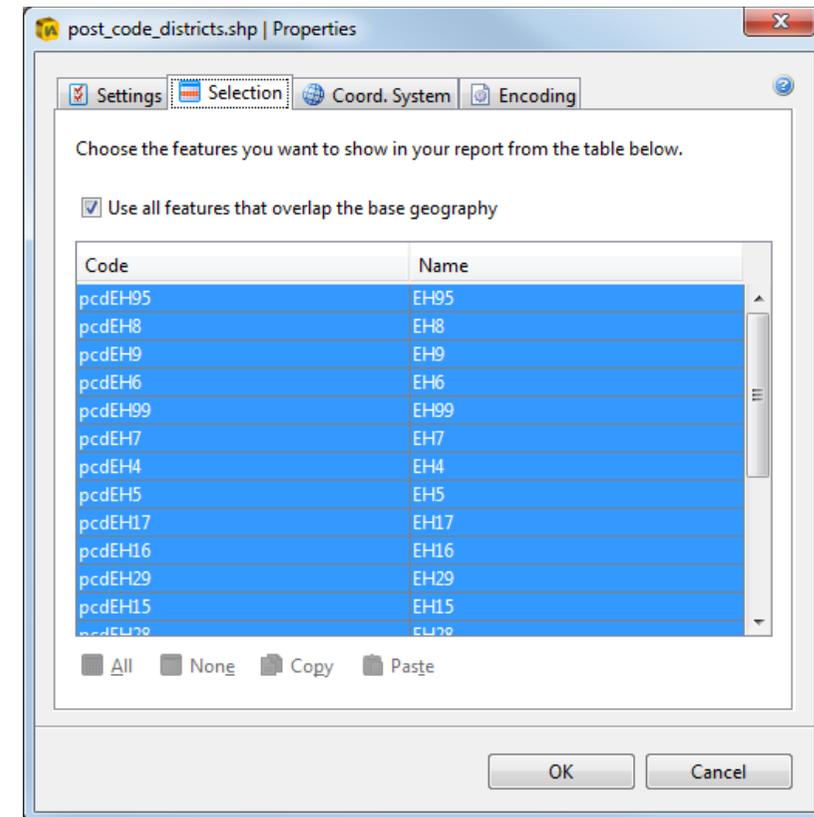
When using an HTML template you will see many more layer properties (Figure 8). If you wish to change these settings it is advised that you adjust them here in the Publisher, even though it is also possible to change them after the publishing process by editing the map.js file in a text editor.

Figure 34



If you edit the properties and click the 'Selection' tab, the following dialog will open (Figure 35).

Figure 35



By default, only the geographic features that overlap a box around the base geography will be published in the report. As the maps in InstantAtlas reports are centred on the base geography, contextual features that do not overlap the base geography are typically irrelevant. This is therefore the default option.



If, however, you wish to have control over which features in the contextual geography are published, then un-tick the checkbox 'Use all features that overlap the base geography'. You can now either leave the default of all features selected or select a subset of features.

The tabs 'Coord. System' and 'Encoding' work in the same way as described in section 'B.3.2.2. Layer Properties of Base Geography Layers'.

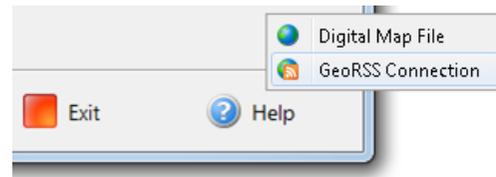
When you have made your choices, click the 'OK' button. Alternatively, click the 'Cancel' button to cancel your changes.

### B.3.4.3. GeoRSS Feeds as Contextual Layers

It is currently not possible to include GeoRSS Feeds into reports published with an HTML template.

If you wish to include a GeoRSS feed as a contextual layer into your Flash report you can do this by clicking the 'Add' button and selecting the 'GeoRSS Connection' option (Figure 36).

Figure 36



Then type the link to the GeoRSS feed into the URL field (Figure 37).

Figure 37



If you wish to change the layer name, border width or fill opacity of the layer you can do this by clicking on the 'Properties' button. Please ignore the 'Icon File' property since this is not supported for GeoRSS feeds.

GeoRSS Feeds are structured in XML format, usually providing a <title> tag and a <content>, <summary> or <description> tag for each geographic feature.

If labels get activated using the Designer (see section C. The InstantAtlas Designer, subsection C.4.3.6. Map Properties) it will show the value of the <title> tag for each entry of the GeoRSS as a label. If tooltips get activated the value of the <content>, <summary> or <description> tag will appear. If none of these three is available, the report will show the value of the <title> tag also in the tooltip. Tooltips of GeoRSS layers can be made "sticky" by simply clicking with the left mouse key when the tooltip is visible. That way it is possible to follow links within the tooltip.

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To add multiple contextual layers click the 'Add' button again and choose either the 'Digital Map File' option or the 'GeoRSS Connection' depending on what kind of contextual layer you wish to add. For any contextual layer, you can click the red cross  to delete it at any time. You can use the



green up/down arrows   to re-order your geographies. The vertical order you see in the Publisher will be preserved in the published report. In the report, a contextual geography will be displayed on top of the geographies below it and beneath the geographies above it. We recommend that any point contextual layers you add are moved above any polygon or line contextual layers for display purposes.

Once you have made your selections, click the 'Next' button. Alternatively, click the 'Back' button to return to the 'Choose Your Data' screen.

### B.3.5. Choose Your Background Images

This step of the publishing process involves choosing background images if these are required. Background images appear in the map(s) of your report to provide additional context and can be switched on and off. Figure 38 shows the map in a dynamic report with background mapping switched on.

Figure 38



The background images for a report can come from the following sources:

1. [A collection of images on a local or network drive](#)
2. [A Web Map Service \(WMS\)](#)
3. [A ArcGIS Server map service](#)
4. [Google Maps](#)

#### B.3.5.1. Adding Images from a Background Image Collection

Any geo-referenced images saved on a local or network drive can be displayed as background mapping. We strongly recommend that each image is no larger than 1 MB in file size. It is important to keep the file size down as the larger the images, the longer it will take for them to load into a report. If your images are larger than 1MB, you can process them to reduce their file size or you can split one image into separate tiles (the report will only load the tiles it needs to fill and map at any given point in time).

To include a layer of background mapping, you must upload an index file into the Publisher. Each layer must have a separate InstantAtlas index file. This index file is an XML file (.xml) that specifies geographic coordinates for each image included in the layer of background mapping. Without this information, InstantAtlas reports would be unable to position background images correctly in the map(s). A sample index file can be found in the 'images' folder created during the installation of your InstantAtlas software. This folder is a convenient place to store all of your background images and index files. It is important that an index file is stored in the same folder as the images that it references.

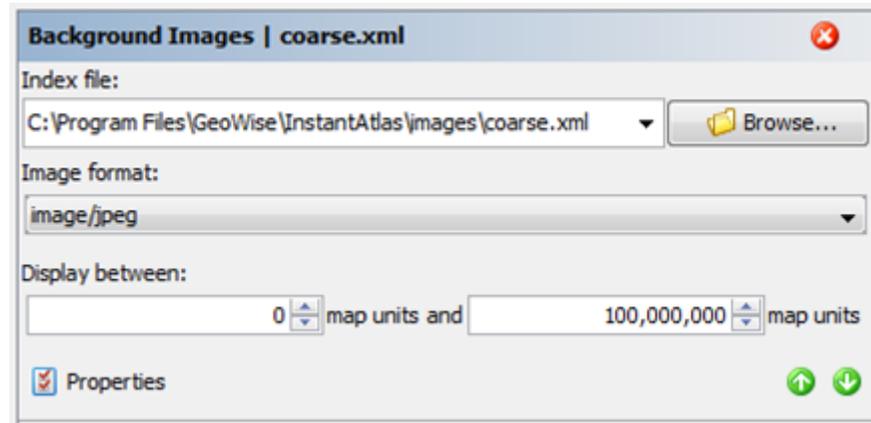




You can find a guide to creating images or index files for background mapping in the InstantAtlas online support resources under 'Tips and Tricks': <http://www.instantatlas.com/supportdownloads.xhtml>

Click the "Add" button to upload an index file and click the 'Background Image Collection' option. You can type the pathname to the index file into the 'Index file' box (e.g. 'C:\images\250k.xml'). You can also access a drop down list of the most recently used index files by clicking the arrow to the right of the 'Index file' box. Alternatively, click the 'Browse' button to search for an index file located elsewhere on your computer or network (Figure 39).

Figure 39



The publisher needs to know the file extension of any images that are used. We currently support JPEG and PNG image formats for use as background mapping, so please specify your image format here. If your images are not in either of these formats you will have to convert them.

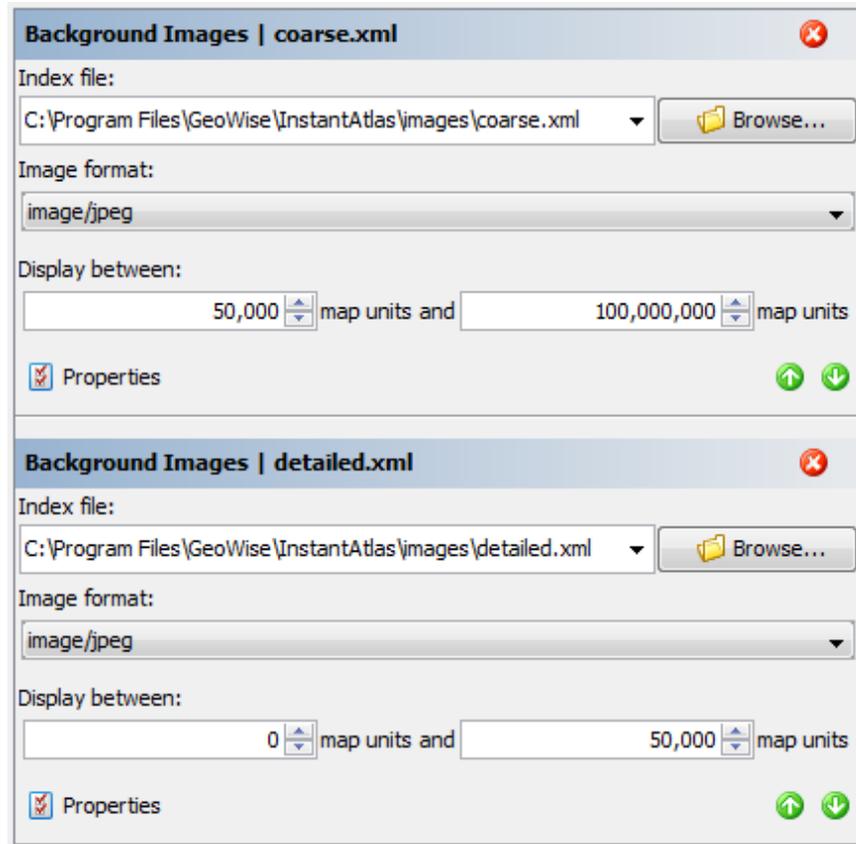
The 'Min extent' and 'Max extent' boxes define the range of map widths at which this background mapping layer will display in your report. The units are map units and therefore depend on the geographic coordinate system of your map files. For example, if the coordinate system is British National Grid the units will be metres. The smaller the 'Min extent' value, the further you have to zoom into the map before this background mapping layer disappears. The greater the 'Max extent' value, the further you have to zoom out of the map before this background mapping layer disappears.

The layer shown in Figure 39 will never switch on if the map is displaying an area that is more than 100,000,000 map units wide. If the area shown in the map is less than 100,000,000 map units wide, this background mapping layer will display, no matter how far you zoom into the map.

You might decide to add a second background mapping layer by clicking the "Add" button and browsing for a new index file called 'detailed.xml' (Figure 40). Imagine that the images referenced by 'detailed.xml' are more detailed than those referenced by 'coarse.xml'.



Figure 40



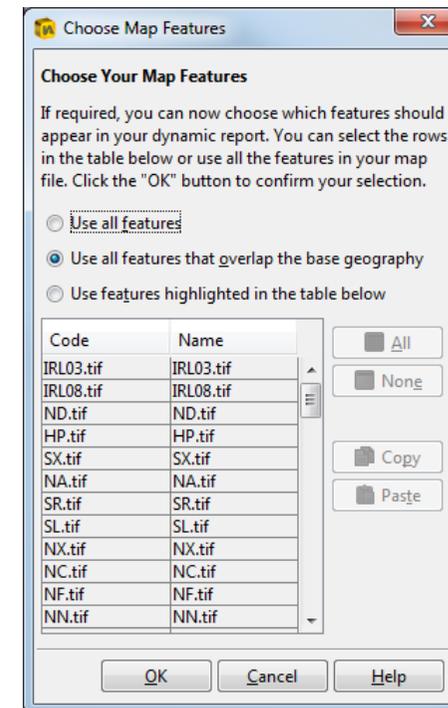
You can see that the 'Min extent' and 'Max extent' values have been edited. The coarser (or less detailed) background mapping layer is set to display for map widths between 50,000 and 100,000,000 units. The more detailed background mapping layer is set to display for map widths between 0 and 50,000 map units. As you zoom into the map in this report, you will reach a point at which the area shown is less than 50,000 map units wide. At this point, the background mapping will switch from one

layer (the images referenced by 'course.xml') to another (the images referenced by 'detailed.xml').

 If you have multiple layers of background mapping, you must ensure that the ranges you specify for the layers do not overlap.

If you wish to make more advanced settings for background mapping, click the 'Advanced' button for a layer. The 'Choose Map Features' dialog will appear (Figure 41).

Figure 41



By default, only the background images that overlap (or intersect) the base geography will be published in the report. As the maps in InstantAtlas



reports are centred on the base geography, images that do not overlap the base geography are typically irrelevant. This is therefore the default option.

If, however, you wish to publish all images referenced by the index file irrespective of whether they overlap the base geography or not then click the 'Use all features' radio button. If you wish to select a particular subset of images to publish in the report, click the 'Use features highlighted in the table below' radio button and make your selection.

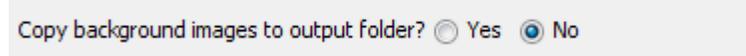
When you have made your choice, click the 'OK' button. Alternatively, click the 'Cancel' button to cancel your selections.



InstantAtlas reports only currently support JPG and PNG as formats for background mapping. File extensions listed in index files are irrelevant and are not used by the Publisher – it is important only that the name of the file (excluding the extension) in the index file matches the name of the JPG or PNG image it relates to.

At the foot of the screen you are asked whether you wish to copy background images to the output folder of your report. The output folder is the folder in which the Publisher saves the published report. By default, InstantAtlas reports look for background images in their output folder. For this reason you will typically leave the 'Yes' radio button selected (Figure 42). Note that Publisher will only be able to copy images to the output folder if it can find these in the same folder as the index file(s) you have uploaded.

Figure 42



Copy background images to output folder?  Yes  No

If you have chosen to include a large number of background mapping images in your report, you might decide to click the 'No' radio button. The images will not be copied to the output folder and after publication you will have to configure your report to look for images in a different folder. This is for file management reasons: if you have a large number of background images, it is not ideal to replicate these in the output folder of every report you publish. It is more efficient to store the images in one folder and configure each of your reports to read the images from this folder. To configure a report to read images from a different folder you must use the InstantAtlas Designer – please consult section 'C. The InstantAtlas Designer', sub-section 'C.4.3.6. Map Properties' for more details.

### ***B.3.5.2. Adding Images from a WMS Connection***

The Web Map Server Connection allows you to build in background layers that come directly from a WMS (Web Map Service) compliant mapping server. You can find out more about the WMS specification at <http://www.opengeospatial.org>.

Although there is no definitive list of available WMS resources, there are a number of resources on the Web including:

[http://www.skylab-mobilesystems.com/en/wms\\_serverlist.html](http://www.skylab-mobilesystems.com/en/wms_serverlist.html)

<http://www.geographynetwork.com/explorer/explorer.jsp?goTo=search&keyword=wms&type=001>



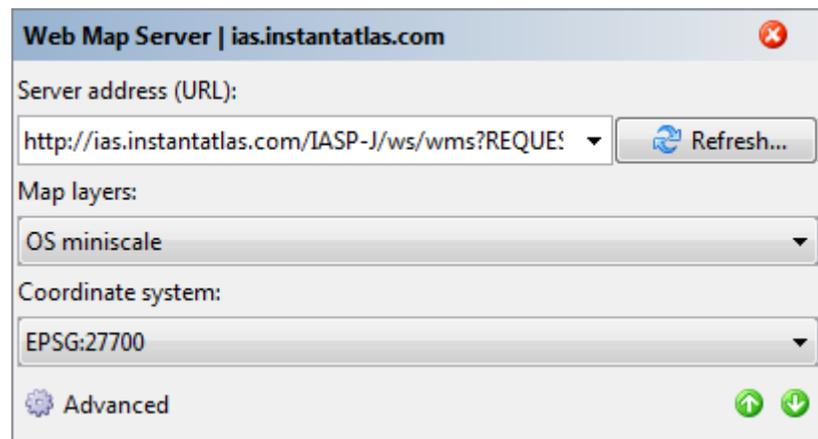
To add a new WMS layer to your dynamic report click on the “Add” button at the bottom of the screen and select “Web Map Service (WMS) Connection”.

Enter the URL address for a WMS service in the Server address box e.g.

<http://ias.instantatlas.com/IASP-J/ws/wms?>

When you hit the refresh button a list of available map layers should appear in the box below (see Figure 43 below):

Figure 43

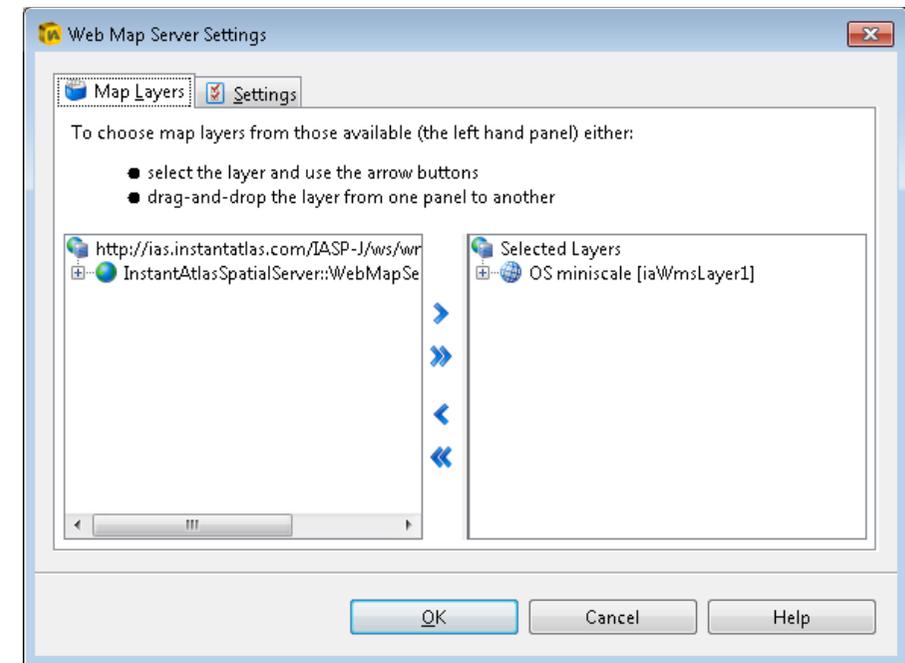


Pick the relevant layer from the drop down box: e.g. OS miniscale.

Finally you should pick a co-ordinate system for the map to come back in. Two of the most commonly used co-ordinate systems will be EPSG: 4326 for decimal degrees of latitude and longitude and EPSG: 27700 for UK national grid.

It is possible to specify further WMS options, such as multiple layers, image formats and transparency by clicking the ‘Advanced’ button. This will launch the Web Map Server Settings dialog box as shown in Figure 44.

Figure 44

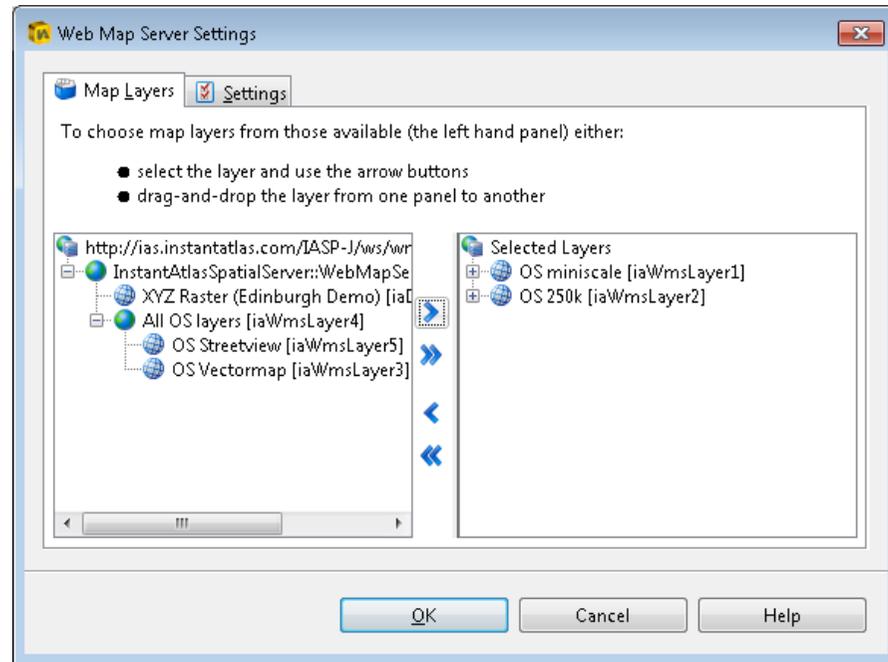


The available list of map layers can be found in the left hand side box, and layer groups can be expanded and collapsed. To add layers, navigate through the groupings to a map layer . Select the layer(s) you wish to add and click the button to move it to your selected layers list as shown in Figure 45.

Layers can be removed individually using the button. The ordering of layers can also be changed using the buttons.

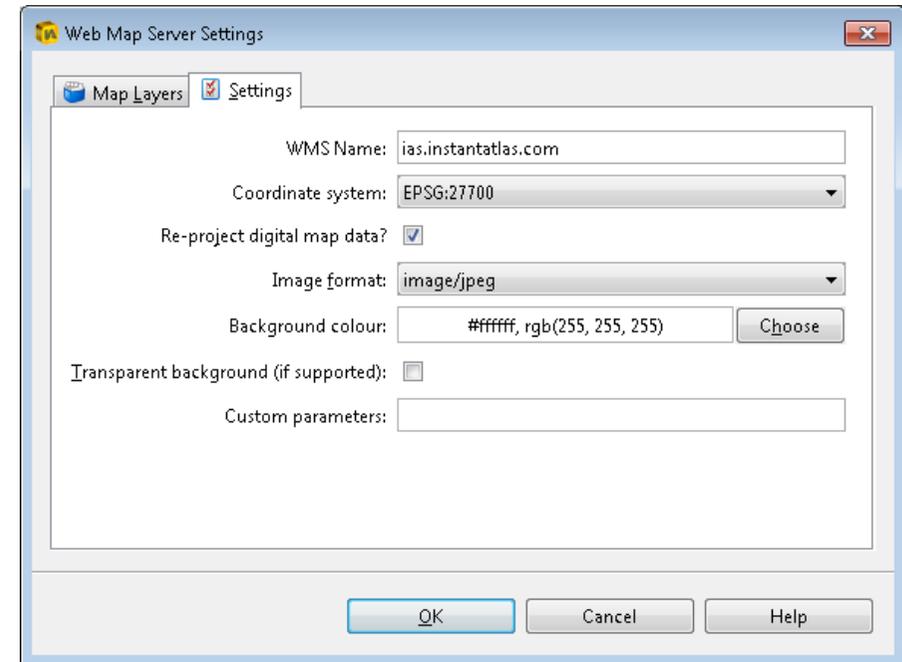


Figure 45



Further settings can be changed by clicking the Settings tab which will open up the dialog box shown below (Figure 46).

Figure 46



Here you can change the name of the WMS Layer. This name will appear in the legend of your dynamic report.

You can choose the coordinate system in which the WMS will send the image data to the report. The 'Re-project digital map data?' property is ticked by default, which means that the Publisher will re-project all base and contextual layers that you have uploaded for your report to match the coordinate system of the WMS.

**⚠ It is vital that you consider the following points:**

1. This re-projection only works if the Publisher knows the coordinate system of your map files. If you are using ESRI shapefiles that



include a .prj file, the Publisher can pick up the coordinate system information out of this file. If your shapefile does not have a .prj file or if you are working with MapInfo MID/MIF or TAB files, you will need to select the appropriate coordinate system from the Layer Properties in the 'Coord System' tab. Alternatively you can re-project these map layers before using them in InstantAtlas.

2. The re-projection will only work if your map file(s) are in one of the following supported coordinate systems:
  - a. Un-projected coordinate systems (e.g. latitude/longitude)
  - b. Coordinate systems that use a Transverse Mercator projection (e.g. British National Grid, UTM zones)
  - c. Global coordinate systems using a Mercator projection.
  - d. Lambert Conformal Conic projection

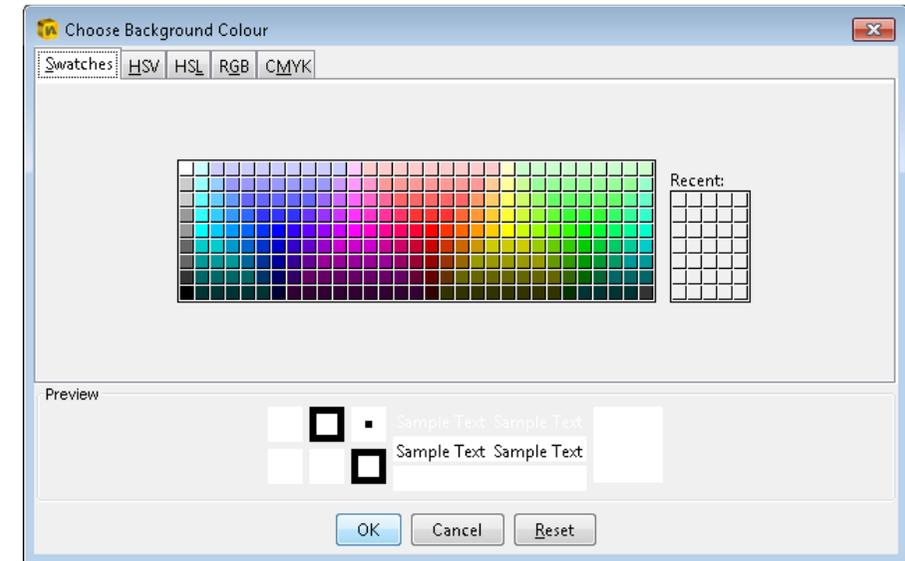
If your map layers are already in the same projection as the WMS you should untick this property.

The image format drop-down returns a list of all available image formats supported by the Web Map Server you are connecting too. Please note that while a large variety of formats may be supported by the WMS server, InstantAtlas will currently only support JPEG (.jpg), PNG (.png) and GIF (.gif) formats, so it is important that one of these formats is chosen.

It is also possible to specify the background colour of the image you request. Imagine choosing a layer that specifies land cover. Rather than leaving the background (areas of no data) white by default, you may wish to request this in blue to represent areas of water. Select the colour you wish to use by clicking the Choose button and selecting a colour from the

available palettes (Figure 47). Once you have selected a colour, click 'OK' to return to the previous dialog screen.

Figure 47



Finally, there is a checkbox option to request the image with a transparent background. This option is dependent upon the WMS server supporting the provision of transparent background images. If not, this request will be ignored by the server. If transparency is supported, take care to also select an image format that supports transparency from the image format drop down list. Formats that support transparency are .png and .gif.

Figure 48 shows a typical request. The transparent background check box is ticked, and we have chosen an appropriate image format that will handle this transparency if the server supports it. If transparency isn't supported, the image will revert to having a blue background colour.



Figure 48

Image format:

Background colour:

Transparent background (if supported):

Custom parameters:

If the WMS you want to use requires additional parameters, you can enter these into the 'Custom parameters' field.

When you have finished choosing your advanced settings, click 'OK' to return to the 'Choose Your Background Images' screen. The dialog may have been updated to reflect any additional layers that have been chosen. For example, Figure 49 shows we have chosen 'OS 250k' and 'OS miniscale' as our two map layers.

Figure 49

**Web Map Server | ias.instantatlas.com**

Server address (URL):

Map layers:

Coordinate system:

 There are a number of issues you should consider when using WMS background mapping:

- Many WMS servers will only support certain coordinate systems and these must match those of your base and contextual geographies. The Publisher can re-project your map layers to match the WMS projection if you have provided information about the coordinate system(s) of your digital map layers.
- Currently in InstantAtlas you cannot control scale thresholds for WMS layers.
- Many WMS servers will limit the scales that you can request data for. So even though the layer may not appear in your map this may be because you need to zoom in further.
- If the checkbox in the legend turns orange when you try to switch the WMS layer on, and no check or tick mark in the box (Figure 50), please ensure that the location you are viewing the dynamic report from is added to your Flash Player trusted sites (Global Security Settings). This is because an external request has to be made from the location from which you are viewing the dynamic report to the WMS server and this will in many instances cause a security issue for the Flash Player. In many circumstances, having the dynamic report on an external web server (rather than a local or network drive), will overcome the need for this.



Figure 50



- If you are not able to see the WMS background once the report is saved on a web server but it is working with a local copy of the report, it may be that your WMS does not provide a cross-domain policy file. This file is required if you are using Flash Player version 11.4 or higher. Please read this article for further information: [http://www.instantatlas.com/downloads/EN\\_Flash\\_Reports\\_Update\\_Sept\\_2012.pdf](http://www.instantatlas.com/downloads/EN_Flash_Reports_Update_Sept_2012.pdf)

Flash Player Security will not be an issue when using an HTML template as they do not need the Flash Player to run.

#### **B.3.5.3. Adding Images from a ArcGIS Server Map Service**

The ArcGIS Server option allows you to incorporate background mapping from a service in ArcGIS Server such as ArcGIS Online. ArcGIS Online provides ready-to-use map services with coverage for many countries. You can find more information about ArcGIS Online here:

<http://www.esri.com/software/arcgis/arcgis-online-map-and-geoservices/map-services.html>

As an example of incorporating ArcGIS Online maps you can click the ArcGIS Server option and paste the URL below into the box:

[http://server.arcgisonline.com/ArcGIS/rest/services/World\\_Street\\_Map/MapServer?](http://server.arcgisonline.com/ArcGIS/rest/services/World_Street_Map/MapServer?)

The way the Publisher handles ArcGIS Server map services is very similar to WMS connections. Please refer to the previous section to get further information on this. You will, however, not be able to choose a different background colour for your ArcGIS Server map service.

#### **B.3.5.4. Adding Images from Google Maps**

There is a dedicated section in this user guide available explaining how to create an InstantAtlas report with a Google Maps background. Please refer to section 'G. Google Maps in InstantAtlas Reports'.

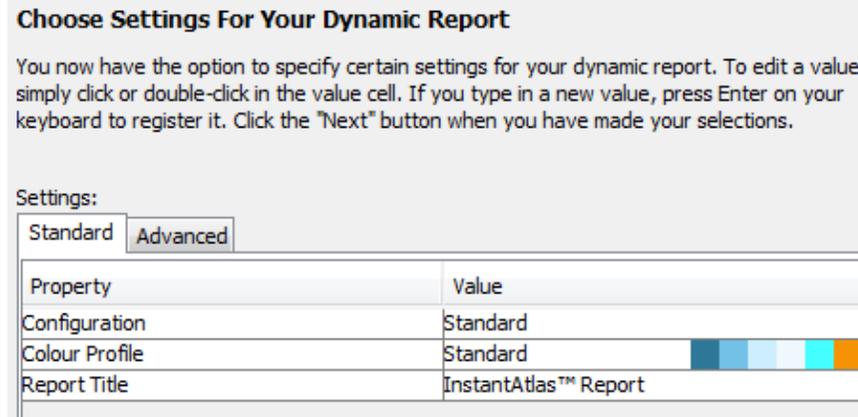
When you have finished choosing your background image settings, click the 'Next' button. Alternatively, click the 'Back' button to return to the 'Choose Your Contextual Geographies' screen.

#### **B.3.6. Choose Settings For Your Dynamic Report**

This step of the publishing process involves specifying editable settings for your dynamic report. The properties available will depend upon the template you chose for your report. The language they appear in will depend upon the language you chose to publish your report in. You can click and drag the divider between the 'Property' and 'Value' column headings to change the width of the columns. An example of the 'Standard' settings can be seen in Figure 51.



Figure 51



Some values are free text and some can be selected from a pick list. To edit a value, simply click in the cell containing it. For text values, double click in the cell, delete the existing value and type a new one. Then press the 'Enter' button on your keyboard to register the new value.

You do not necessarily have to edit every value. The table below is a cross-template list of properties with a description for each. We have excluded the HTML template properties as these are covered in a separate section ('L. The InstantAtlas HTML Profile Template') for that template.

Property	Description
Configuration	The configuration option allows you to choose the default design and layout from those that are available. Once the dynamic report has been published the design and layout can be changed even further using the Designer.

Colour Profile	The colour profile allows you to choose a default colour scheme for the dynamic report. Once the dynamic report has been published the colour scheme can be changed even further using the Style Editor.
Report Title	The title of your report as viewable in the title screen of your browser when the report is opened.
Report Keywords	During publishing, these keywords will be saved as a meta tag in the atlas.html file. They are helpful if you want your report to be found by search engines. Ideally you would provide 3-4 keywords about the topic of your report.
Report Description	During publishing, this description will be saved as a meta tag in the atlas.html file. It is helpful if you want your report to be found by search engines. Ideally you would provide a description about the topic of your report with approx. 155 characters.
Map Margin	The greater the value, the greater the amount of empty space that surrounds your base geography in the map(s) of your report. If the base geography for your report is a point map file, it is typical to add a map margin for improved display.

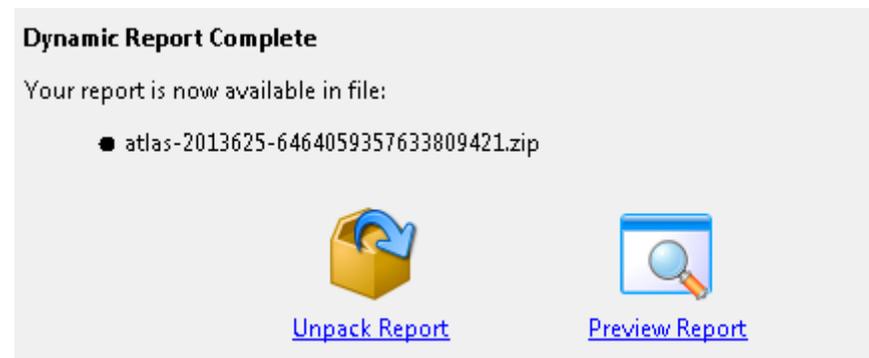
Once you have made your selections, click the 'Publish' button. Alternatively, click the 'Back' button to return to the 'Choose Your Background Images' screen.



### B.3.7. Unpacking and Starting Your Report

This is the final step of the publishing process. Your report has been published and is contained in a ZIP archive (.zip), the name for which is provided at the top of the screen (Figure 52). This archive contains the set of files making up your dynamic report in a compressed format. The archive makes it easy to group the files and makes transporting and copying them faster.

Figure 52



Click the 'Preview Report' button to view the report you have published. The report will be unpacked to a temporary folder C:\Documents and Settings\username\Local Settings\Temp (Windows XP) or C:\Users\username\AppData\Local\Temp (Windows Vista or later) for preview purposes.

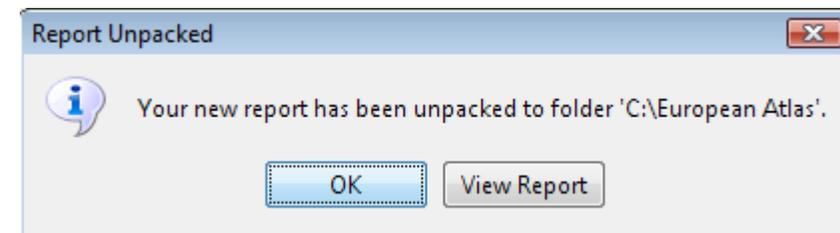
If you are happy with the preview of your dynamic report, you should click the 'Unpack Report' button. This will enable you to carry out any of the actions listed below:

1. View the report once you have closed the Publisher

2. Create new data files for your report using the Excel or Access Data Manager
3. Create a new design for your report using the Designer
4. Edit the Stylesheet to change the appearance of your report using the Style Editor

If you click the 'Unpack Report' button to unpack the report, you will be prompted to choose a folder to unpack the contents of the archive to. Browse to the folder of your choice and click 'OK'. If the folder you are unpacking to already contains a report you will be asked if you wish to overwrite the existing files. You will be informed when your report has been successfully unpacked (Figure 53).

Figure 53

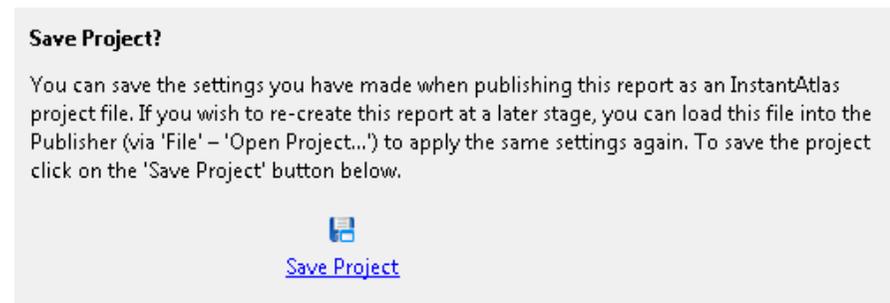


You can click the 'View Report' button to start the report in your default Internet browser (note that this button may be blocked by your system settings if the output folder is located on a network drive). Alternatively, click 'OK' to close the dialog you can view it by browsing to the output folder and double clicking the file called 'atlas.html'. Remember that for Flash dynamic reports you need the Adobe Flash Player 9 or later installed on your computer to view the report.



The final screen of the Publisher also gives you the option to save the Publisher settings you have made during the publishing process into an InstantAtlas project file (Figure 54). If you need to produce the same report again or wish to publish a very similar report at a later stage you can load this project file into the Publisher via the menu option 'File' – 'Open Project...'. This will apply the same settings again.

Figure 54



If you have finished publishing, click the 'Exit' button to close the Publisher. If you wish to publish another report, click the 'Restart' button to return to the 'Choose a Template' screen. Alternatively, click the 'Back' button to return to the 'Choose Your Output Folder' screen.

## B.4. Publisher Configuration File

The location of the Publisher configuration file will depend upon your operating system.

With Vista it is here:

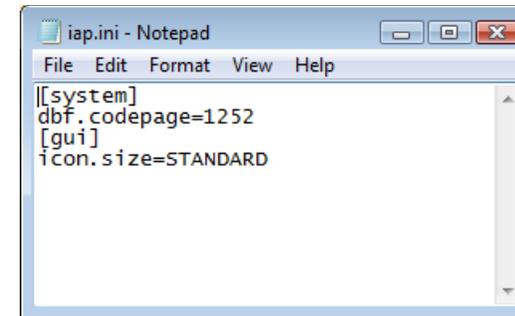
C:\ProgramData\GeoWise\InstantAtlas

With XP it is here:

C:\Documents and Settings\All Users\Application Data\GeoWise\InstantAtlas

You can open this file with a text editor such as Notepad (see Figure 55).

Figure 55



### B.4.1. Changing the Interface Language of the IA Tools

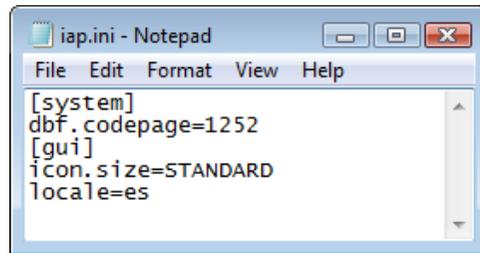
You can add a new setting to control the language for the interfaces of the InstantAtlas tools (Publisher, Designer and Style Editor). The default for this is UK English. To make the software use a language pack, you must add one of the settings shown in the table below on a new line below [gui]:

Setting	Language you wish to run the software in...
locale=en_US	US English
locale=de	German
locale=es	Spanish
locale=fr	French

If you would like the interfaces to display in Spanish for example, your iap.ini file should look like that shown in Figure 56.



Figure 56



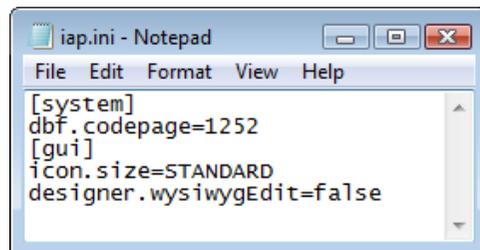
Save the iap.ini file and start the Publisher. Assuming you have installed the correct language pack, the interface text will now be in the language that matches your locale setting.

### B.4.2. Disabling the WYSIWYG Interface of the Designer

When opening the config.xml file of a Flash report that was published using a template in version 6.5.0 onwards, the Designer will open by default with the WYSIWYG ('What-You-See-Is-What-You-Get') interface. If you would like to disable this interface, you can do this by adding the following on a new line below [gui] into the iap.ini file: `designer.wysiwygEdit=false`

Your iap.ini file should look like that shown in Figure 57.

Figure 57



## B.5. Publisher Error Logs

When an error occurs in the Publisher, a log file (.log) is created in the following places, depending on your operating system:

### Basic log files:

Windows Vista and Windows 7:

C:\Users\username\AppData\Local\GeoWise\InstantAtlas\ia{x}.log

Windows XP:

C:\Documents and Settings\username\Local Settings\Application Data\GeoWise\InstantAtlas\ia{x}.log

### Advanced log files:

Windows Vista and Windows 7:

C:\Users\username\AppData\Local\Temp\ia\_stderr.log

Windows XP:

C:\Documents and Settings\username\Local Settings\Temp\ia\_stderr.log

Where *username* is your username and {x} is a numeral. There may be multiple log files in these folders. Check the date and time of creation to identify the one you require. You can open a log file using any text editor (e.g. Notepad). When contacting the support team for troubleshooting, please include these error messages as they can help your support provider resolve problems quickly.



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## C.1. About this Section

The InstantAtlas Designer is a tool for changing the design of an InstantAtlas dynamic report. You change the design of a report for the following reasons:

1. To change the visibility, layout, text, colours and configuration of existing report components (maps, tables, charts, buttons, etc)
2. To insert components that we have made invisible by default (e.g. the advanced pie chart) or insert your own buttons, text or images.

The Designer allows you to design a report that you have already published. The design for an InstantAtlas report is saved in a configuration file called 'config.xml'.

Every report has a 'config.xml' file. This is located in the output folder for the report (along with the other files making up the report) and is in XML format. XML stands for Extensible Markup Language and is a flexible format for storing, structuring and publishing information. It is important to realise that the config.xml file is specific to a given version of a given InstantAtlas template (see section 'C.5. Applying a Design to Other Dynamic Reports' for more information).



When designing your report you should make sure that you tailor the design to your audience. This includes keeping in mind the level of expertise of your target group together with possible visual impairments of the end-users.



Also be aware of the type of computer monitor screen that the majority of your end-users will be using. In particular, the minimum screen resolution of the monitor used by your audience is very important. Many web designers currently ensure their interfaces are readable at a minimum screen resolution of 1024 x 768 pixels. In many cases modern PC screens support much higher screen resolutions. If you are developing a report for relatively widespread usage (particularly if it is exposed to an external citizen audience) then we would recommend you set your monitor screen to 1024 x 768 pixels and then open InstantAtlas Designer to create your layout. This will ensure that the report is well laid out for the maximum number of end-users. Alternatively, create your report then change your screen resolution to 1024 x 768 to check that your report design is acceptable.

## C.2. Starting the Designer

The Designer can be started in one of several ways. Start the Designer by clicking 'InstantAtlas Desktop Edition', 'InstantAtlas Designer' in the Windows Start menu or by clicking the 'InstantAtlas Designer' icon on your desktop. If you chose not to create shortcuts during installation of the software, browse to the 'InstantAtlasDesigner.exe' file (by default this will have been installed in C:\Program Files\GeoWise\InstantAtlas) and double click it. The Designer will open with a blank canvas and you will then be able to open the configuration file of your report.

Alternatively you can browse to the output folder of a published report, right-click on the configuration file (called config.xml) and choose the 'Edit with InstantAtlas Designer' option.



## C.3. The Designer Window

The Designer has menus, a toolbar and a canvas. The menus and toolbar give you access to the various functions, such as opening a configuration file, and the canvas allows you to view the various template components (e.g. map, data table, bar chart, bar chart title, etc.).

### C.3.1. Menus and Toolbars

Figure 58 shows the Designer menus and toolbar.

Figure 58



The menus and toolbar give you easy access to the Designer options. You can access a menu by clicking on it or holding down the 'Alt' key on your keyboard and pressing the underlined character in the menu name. For example, you can hold down 'Alt' and press 'F' to access the File menu. Note that these keyboard shortcuts exist for many functions in the Designer. If you hold your mouse pointer over an option in any of the drop down menus, a tooltip will appear. Similarly, if you hold your mouse pointer over an icon in the toolbar, a tooltip will appear.

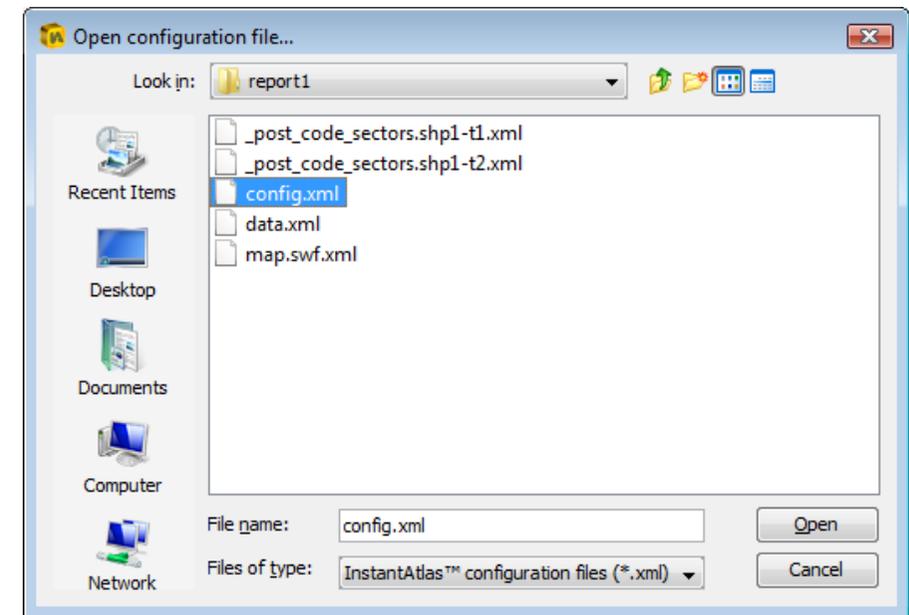
The "Refresh Internet Explorer preview panel", which can be found on the far right of Figure 58 will refresh the dynamic report image in the Design View and Published View.

### C.3.1.1. File

#### Open

Click 'Open' and the 'Open configuration file...' dialog will appear (Figure 59). Alternatively hold down 'Ctrl' and press 'O' on your keyboard. Choose the file (called 'config.xml') for the report you wish to change and click 'Open'.

Figure 59



#### Open ArcGIS Online Application

Please refer to section 'M.3.1. Opening an ArcGIS Online Application' for specific information on this option. For general information on ArcGIS Online and InstantAtlas please read section 'M. The InstantAtlas ArcGIS Online Templates'.



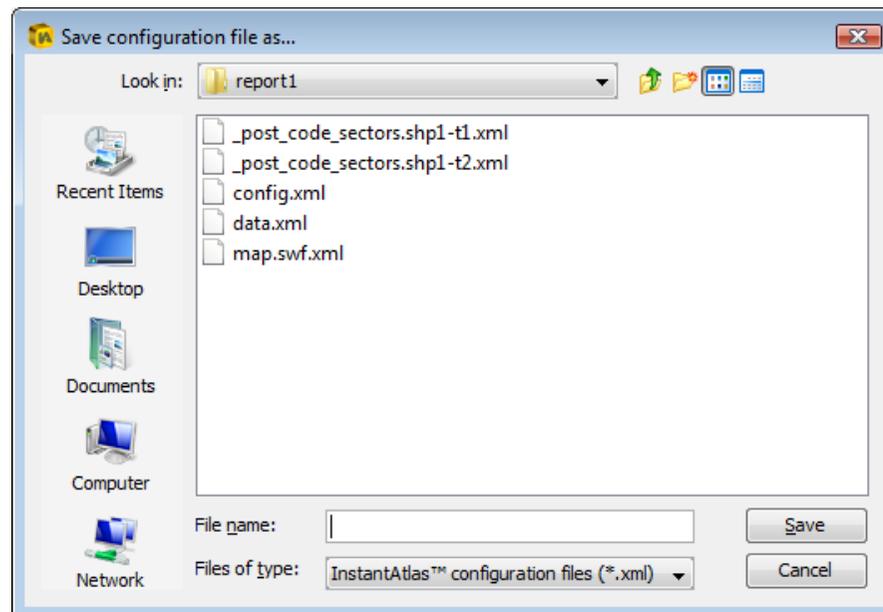
## Save

Click 'Save' to save changes to the configuration file you are changing. Alternatively hold down 'Ctrl' and press 'S' on your keyboard. When restarted, the dynamic report will reflect any changes that you have made to its configuration file.

## Save As/To...

Click 'Save As/To...' and then 'Save As' if you wish to save your changes to a new configuration file. Alternatively hold down 'Ctrl' and 'Shift' and press 'S' on your keyboard, the 'Save configuration file as...' dialog will open (Figure 60). Browse to the folder in which you wish to save your new configuration file, type a name in the 'File Name' box and click 'Save'.

Figure 60



This option is useful if you wish to save different designs for a report. Simply save the different configuration files to the report's folder with names such as 'config1.xml', 'config2.xml', 'config3.xml', etc. Once you have saved these files, you simply choose which one is active by renaming it 'config.xml'. This is because by default an InstantAtlas report looks for a configuration file in its folder called 'config.xml' and will ignore any others.

Click 'Save As/To...' and then 'ArcGIS Online Application' if you wish to save the currently open configuration file and stylesheet to an existing ArcGIS Online Web Application. Please refer to section 'M.3.4. Saving changes back to ArcGIS Online' for specific information on this option. For general information on ArcGIS Online and InstantAtlas please read section 'M. The InstantAtlas ArcGIS Online Templates'.

## Save Styles To...

Click 'Save Styles To...' and then 'ArcGIS Online Application' if you wish to save the currently open stylesheet (not the configuration file) to an existing ArcGIS Online Web Application. Please refer to section 'M.3.4. Saving changes back to ArcGIS Online' for specific information on this option. For general information on ArcGIS Online and InstantAtlas please read section 'M. The InstantAtlas ArcGIS Online Templates'.

## Revert

Click 'Revert' and then 'To Template' if you wish to return to the original design, thereby reversing any changes you have made. Click 'Revert' and then 'To File' if you wish to return to the design as it was when you last clicked 'Save'.



## Apply

This option is only available if you opened the Designer from the Publisher. Click 'Apply' when you have made all of your design changes. The changes will be applied to the configuration file of the report you are publishing and the Designer will close.

## Recent Files

Click 'Recent File' to access a list of recently opened files.

## Close

Click 'Close' to close the Designer. If you have not saved your changes, you will be prompted to do so.

### C.3.1.2. Edit

## Undo

Click 'Undo' to undo changes that you make to your design. Alternatively hold down 'Ctrl' and press 'Z' on your keyboard. Most changes can be undone in this way. You can click 'Undo' multiple times in a row to undo a series of changes. This option will be greyed out if there are no changes to undo.

## Redo

Click 'Redo' to reapply any changes that you have undone by clicking 'Undo'. Alternatively hold down 'Ctrl' and press 'Y' on your keyboard. You can click 'Redo' multiple times in a row to reapply a series of changes. This option will be greyed out if there are no changes to reapply.

## Delete

All of the components (e.g. charts, chart titles, buttons, etc) can be deleted. To delete a component, click on it to select it in the interface and then click 'Delete'. Alternatively you can press 'Delete' on your keyboard. The component will disappear.

## General Properties

Click 'General Properties' to access the general properties for the dynamic report. Alternatively hold down 'Ctrl' and 'Shift' and press 'P' on your keyboard. This will show the general properties in the pane located on the right side of your designer window. See the section below for more instructions on changing properties.

### C.3.1.3. Select

The 'Select' menu allows you to easily select components in your report. This is useful if you want to change properties of a component that is hidden behind another component e.g. the data explorer that might be hidden behind the map.

### C.3.1.4. Insert

## Button

Click 'Button' to insert a new button that will be displayed in your report and can be made to link to a resource of your choice (e.g. a webpage or a PDF document saved on your computer). You can also use the new button to toggle components or call ActionScript / JavaScript commands. Click on the new button in the canvas to select it and drag it to the desired location.



If necessary, you can resize it by dragging the selection handles. Refer to the section 'C.4.3.2. Button Properties' for instructions on changing the properties for your new button.

## Image

Click 'Image' to insert any static image of your choice into your report. This might be the logo of your organisation or a corporate banner for example. JPEG, PNG, GIF and SWF image formats are all supported. We recommend where possible inserting an image in SWF format to ensure the highest visual quality of the inserted graphics. Click on the new image in the canvas to select it and drag it to the desired location. If necessary, you can resize it by dragging the selection handles. For instructions on how to make changes to the properties of your new image please refer to the section 'C.4.3.3. Image Properties'.

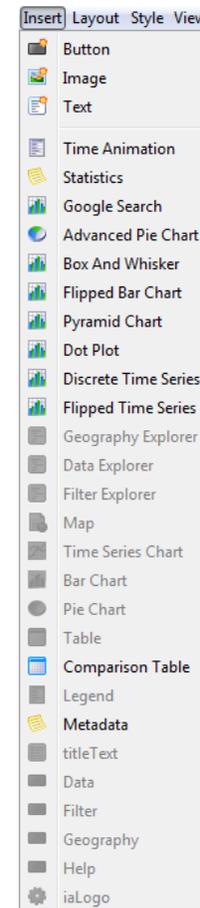
## Text

Click 'Text' to insert any text of your choice into your report. Click on the new text in the canvas to select it and drag it to the desired location. For instructions on how to make changes to the properties of your new text please refer to section 'C.4.3.3. Image Properties'.

## Deleted components and components that are hidden by default

You have the option of inserting previously deleted components and various components that are not shown by default in your InstantAtlas reports. Click on the 'Insert' menu (Figure 61).

Figure 61



### C.3.1.5. Layout

The 'Layout' options allow you to rapidly align multiple objects. You must first select multiple components to align – you can do this by holding down the 'Shift' button on your keyboard while clicking components in the canvas.

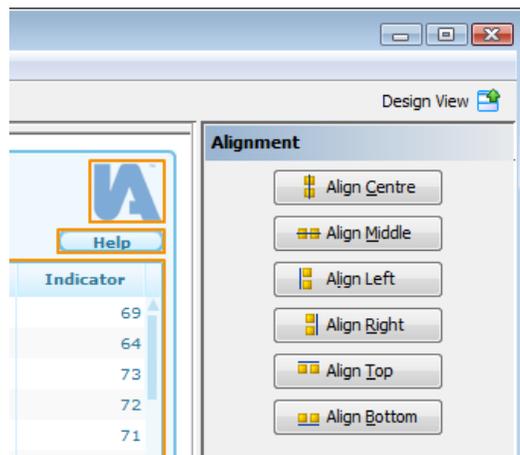




Note that it is possible to move selected components as a group simply by clicking and dragging any of the selected components.

Once you have selected two or more components, the layout options become active. These are available from the menu but also from the properties pane on the right (Figure 62).

Figure 62



Simply click the option for the alignment you wish to achieve.

### C.3.1.6. Style

#### Edit Styles

Click 'Edit Styles' to open the InstantAtlas Style Editor. This tool lists all the styles used by the report. Note that most of these can be edited via the Designer (see below). It is therefore unlikely you will need to use the Style Editor unless you are making advanced style changes (e.g. adding new styles or making global style changes).

### Palettes

Click 'Palettes' if you wish to edit the palettes or colour schemes used to shade the map features in your dynamic reports. The 'Map Palettes & Colour Schemes' dialog will open. For instructions on how to make changes please refer to section 'C.4.4. Editing Map Palettes'.

### C.3.1.7. View

#### Zoom

Hold your mouse pointer over 'Zoom' and a list of zoom options will appear. Choose a new zoom level to zoom into or out of the canvas. Alternatively, choose 'Fit' to make the canvas fit the Designer window. There are keyboard shortcuts for each zoom level (shown to the right of the zoom percentage).

#### Design View

Click 'Design View' or press Ctrl + Shift + D to see a preview of your report within the canvas area of the Designer window. In this view, you can change the layout of the report, resize, insert and delete components, and edit styles and properties as required. Select a component then hover over it to see its position properties displayed in the bottom left corner; the numbers are in the order of X, Y, Width and Height. Select and drag a component to see the values change. After editing the General Properties, Component Properties or any of the Styles, click the refresh button that appears at the bottom of the properties pane to view those changes in the designer panel. Please remember to save your edits by going to File then Save, or by clicking on the save icon.



It is currently not possible to use the Design View for reports that are created with an HTML template.

### Published View

Click 'Published View' or press Ctrl + Shift + P to view the report as it would appear in an internet browser. You cannot make edits to individual components in this view. However, you can make changes to General Properties in this view. After editing General Properties, click the refresh button that appears at the bottom of the General Properties panel to view those changes in the designer panel. Please remember to save your edits by going to File then Save, or by clicking on the save icon.

### Wireframe View

Click 'Wireframe View' or press Ctrl + Shift + W to see a wireframe view of the report in the Designer window. In this view, you can change the layout of the report, resize, insert and delete components, and edit styles and properties as required. To see your changes take effect in the report, switch to the 'Design View' or 'Published View'. Please remember to save your edits by going to File then Save, or by clicking on the save icon.

### Refresh Preview

By clicking this you will refresh the 'Design View' or 'Published View'. It has the same effect as the refresh button which appears at the bottom of the properties pane when you change properties which require a refresh of the view.

### C.3.1.8. Help

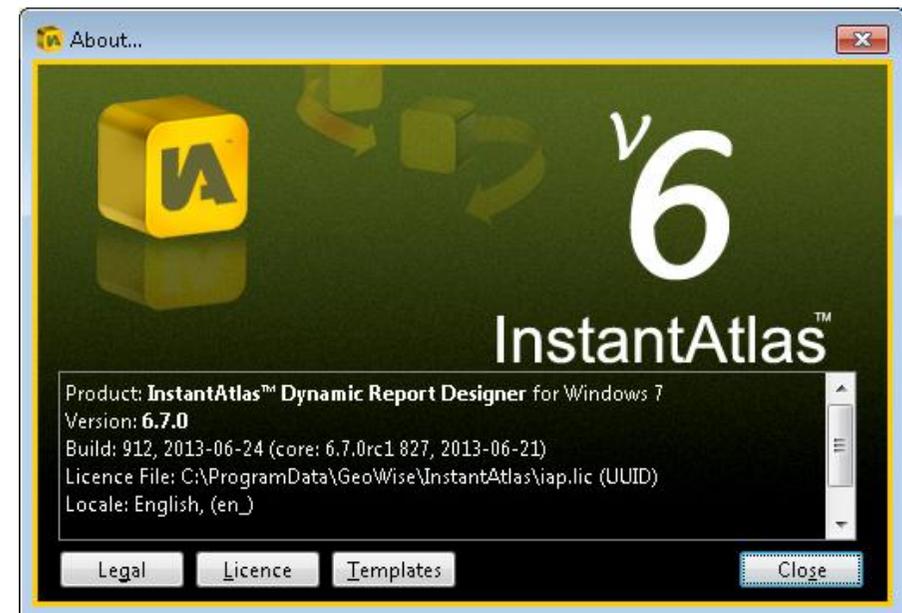
#### Help on the Designer

Click 'Help on the Designer' to access the help pages for the Designer.

#### About

Click 'About' to open the 'About' dialog. It contains information regarding your Designer application, including the version number and the location of your licence file (Figure 63).

Figure 63



There are also three buttons linking to additional information. The 'Legal' button links to the InstantAtlas End-User Licence Agreement. The 'Licence' button links to 'Licence File Information', from which you can also

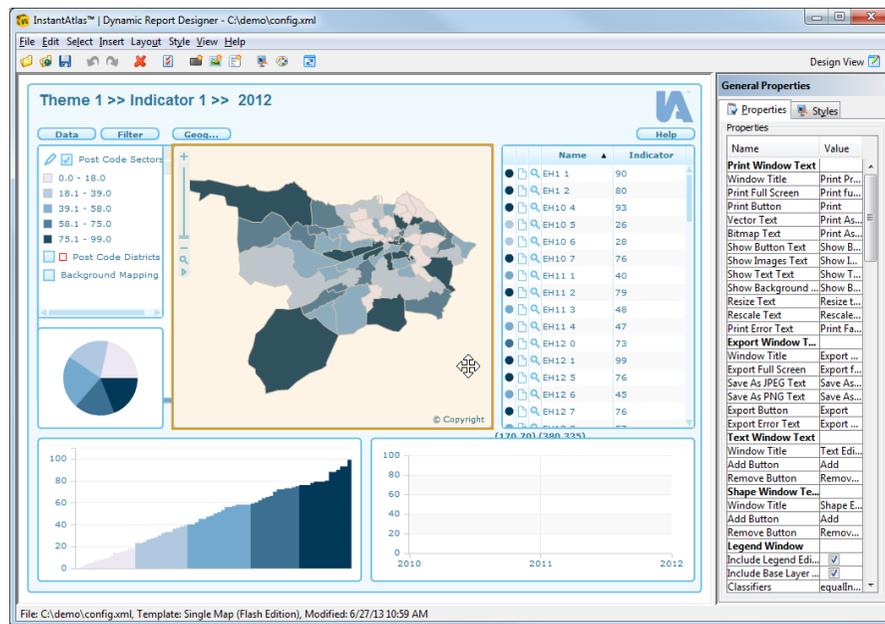


upload a new licence file. The 'Templates' button links to an overview of available templates and also allows new templates to be uploaded.

### C.3.2. The Designer Canvas

Figure 64 shows an example of the Designer canvas in 'Design View' with the Properties Pane.

Figure 64



The size and position of the components in your report are shown in the canvas. You can click any component to select it. When selected, a component gains a highlighted border. To resize a component, hover over the sides of the component until a double-sided arrow appears, click and hold down the mouse over the side, then move the mouse to see the component resize. Similarly you can move components by hovering over a

component (but away from its sides) to see a four-sided arrow. While viewing the four-sided arrow, click and hold down your mouse, then move the mouse to move the component. To deselect a component, click on an empty part of the canvas. Clicking on an empty part of the canvas will also cause General Properties to appear in the right-hand panel of the screen. The components properties will show in the Properties Pane on the right side of the Designer window.

## C.4. Creating a New Design

### C.4.1. Moving and Resizing Components

The canvas allows you to change the position and dimensions of components by clicking and dragging. Simply click on a component to select it and drag it to a new location. Click on the border of a component and drag it to change the dimensions of the component.

### C.4.2. General Properties

#### C.4.2.1. Introduction

The properties in the configuration file are template specific. So the list of properties for a report published using the Flash Single Map template may be different to that for a report published using the HTML Single Map template or the Flash Double Map template.

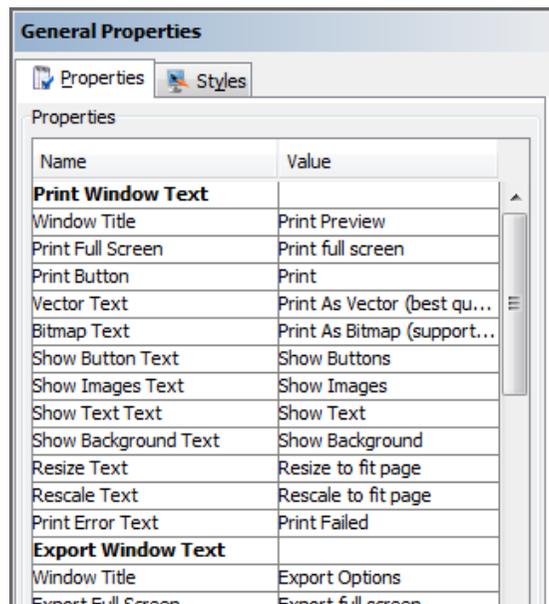


You can view a description for any property by holding your mouse pointer over its name. If you require further information regarding a property please contact your support provider.



To access the general properties for the report, ensure that no components are selected in the interface (simply click on an empty part of the canvas to deselect a selected component). The general properties of the dynamic report will show in the properties pane in the right side of the window (Figure 65).

Figure 65



You can click and drag the dividing line between the two columns to change column width. Hold your mouse pointer over each cell in the 'Name' column to view a longer description of the property.

To change a value that can be True or False, simply click the checkbox in the 'Value' column. Some values are chosen from a pick list – click in the cell and select your value from the pick list. To change a numerical value, click in the cell containing the value. Up/down arrows will appear and you

can use these to change the value. Alternatively, you can type a new number into the cell but you must then press 'Enter' on your keyboard to register the new value. To change a free text value, double click in the cell containing the value and type a new value. Most property and style changes will not appear instantly in the Design View. You will need to click the refresh button that appears at the bottom of the properties pane to refresh the view (Figure 66).

Figure 66



 Please note: There are properties which would require a complete new load of the report to be visible in the Design View. These will not show when clicking the refresh button. You can, however, save your changes and view them by opening your report in the browser. Alternatively, closing and reopening the Designer will make these changes visible in the Design View.

#### C.4.2.2. Configuring the Visible Text in the Report

In InstantAtlas HTML dynamic reports you can change the text for exporting, sharing and for the Legend classifiers in the general properties. Other text can be changed within the specific component properties.



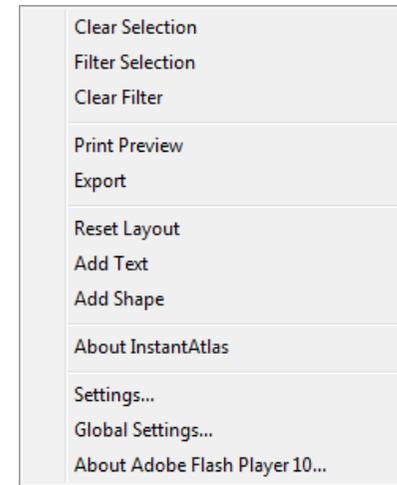
Much of the text that appears in an InstantAtlas report can be configured using general properties. All static tooltips, for example, appear in the list of general properties and can be edited. The labels for the legend types that are displayed in the legend dialog and all of the text you see in the Context Menu can be changed as well. This is important to ensure that the InstantAtlas templates can be made multilingual – it must be possible for the person designing the report to change all visible text. Note that not all text is configurable via the Designer though. Theme and indicator names, for example, are read from the XML data files and must be changed there.

#### C.4.2.3. *Configuring the Contextual Menu (Right Mouse Button Menu)*

In InstantAtlas HTML dynamic reports there is no context menu to ensure touch screen friendliness. Some of the functions (Clear Selection, Filter Selection, Clear Filter, Print, Export) can be accessed via toolbars in the report. This section therefore applies to the Flash dynamic reports only.

When you right-click on any place in the report you will get a contextual menu with different options. Figure 67 is the context menu and is how it looks like by default.

Figure 67



In the general properties of the Designer you can adjust which of these options the end-user should see in the context menu. The three bottom ones 'Settings...', 'Global Settings...' and 'About Adobe Flash Player [version number]...' cannot be removed since these are provided by the Flash player itself.

**Context Menu: Clear Selection?** – Allows the user to clear all selected features with one click. We suggest that you always leave this in the context menu.

**Context Menu: Clear Comparison Selection?** – This option is not included by default in the context menu but if your report contains comparison areas and you enabled the comparison table you may like to have this option in the context menu so that the end-user can clear the selection he or she has made in the comparison table.



**Context Menu: Filter Selection?** – Allows the user to create a filter out of the current selection. When this option is included in the context menu you should also enable the ‘Context Menu: Clear Filter’ option.

**Context Menu: Clear Filter?** – This option should be enabled when you have filters defined in your xml file and when you allow the end-user to create a filter out of the current selection (‘Context Menu: Filter Selection?’ option ticked)

**Context Menu: Reset Layout?** – In version 6 of InstantAtlas the user has the possibility to change the size and location of the components in the browser window. Components can also be deleted to create the desired layout for printing or exporting. If you enable the reset layout option in the context menu the user can restore the layout of the report without needing to refresh the browser window (refreshing the browser window would include loading all of the data again).

**Context Menu: Print?** – Allows the user to open the print preview dialog. If you do not wish for your report or single components to be printable then you should not include this option in the context menu.

**Context Menu: Export?** – Allows the user to open the export dialog. If you do not wish for your report or single components to be exportable then you should not include this option in the context menu.

**Context Menu: Add Text?** – This option opens up a window that allows the end-user to insert custom text in the report.

**Context Menu: Add Shape?** – This option opens up a window that allows the end-user to insert custom shapes in the report.

**Context Menu: About?** – This option opens up a window showing the version number of the InstantAtlas template that was used to create the report. It also includes a link to the InstantAtlas website. We recommend that you leave this option in the context menu so that you can refer to the version number if you contact the InstantAtlas support team about this report.

### C.4.3. Component Properties

#### C.4.3.1. Introduction

To access the properties for a component, ensure that it is selected in the canvas (Figure 68).



Figure 68

Name	Value
Show Title Bar?	<input type="checkbox"/>
Title	Legend
PopUp Window Visible?	<input type="checkbox"/>
PopUp Window?	<input type="checkbox"/>
Legend Select	<input checked="" type="checkbox"/>
Legend Highlight	<input checked="" type="checkbox"/>
Classification Type	quantile
Use Legend Min and Max?	<input type="checkbox"/>
Legend Minimum	0.0
Legend Maximum	300.0
Symbol Size	10
Point Proportional Symbols	<input checked="" type="checkbox"/>
Point Symbol Min Size	5
Point Symbol Max Size	30
Custom Classifier Property Id	customClassifier
Custom Colours Property Id	customColours
Custom Breaks Property Id	customBreaks
Custom Labels Property Id	customLabels
Custom Palette Property Id	customPalette

Change the values in the same way as that described for the general properties of the report.

#### C.4.3.2. Button Properties

If you view the properties for a button component (e.g. the Data button), you will get a tab called 'Links' (Figure 69).

Figure 69

For most buttons in Flash dynamic reports, the value in the URL box will start 'script', followed by the name of a script function.

Available ActionScript functions that can be used for buttons in Flash reports are:

script:toggleMap	Toggles map visibility
script:toggleTimeSeries	Toggles time series chart visibility
script:toggleDiscreteTimeSeries	Toggles discrete time series chart
script:toggleFlippedTimeSeries	Toggles flipped time series chart
script:toggleBarChart	Toggles bar chart visibility
script:toggleFlippedBarChart	Toggles flipped bar chart visibility
script:toggleboxAndWhisker	Toggles box and whisker chart visibility
script:togglePieChart	Toggles pie chart visibility
script:toggleAdvancedPieChart	Toggles advanced pie chart visibility
script:toggleMetadata	Toggles metadata visibility
script:toggleTable	Toggles table visibility
script:toggleComparisonTable	Toggles comparison table visibility
script:toggleLegend	Toggles legend visibility
script:toggleGeogExplorer	Toggles geography explorer visibility



<code>script:toggleDataExplorer</code>	Toggles data explorer visibility
<code>script:toggleFilterExplorer</code>	Toggles filter explorer visibility
<code>script:toggleTimeAnimation</code>	Toggles time animation visibility
<code>script:toggleScatterPlot</code>	Toggles scatter plot visibility
<code>script:toggleSpineChart</code>	Toggles spine chart visibility
<code>script:toggleBubblePlot</code>	Toggles bubble plot visibility
<code>script:togglePyramidChart</code>	Toggles pyramid chart visibility
<code>script:toggleStats</code>	Toggles statistics box visibility
<code>script:toggleDotPlot</code>	Toggles dot plot visibility
<code>script:toggleSearch</code>	Toggles Google search box visibility
<code>script:toggleMap2</code>	Toggles map 2 visibility
<code>script:toggleTimeSeries2</code>	Toggles time series chart 2 visibility
<code>script:toggleBarChart2</code>	Toggles bar chart 2 visibility
<code>script:togglePieChart2</code>	Toggles pie chart 2 visibility
<code>script:toggleMetadata2</code>	Toggles metadata 2 visibility
<code>script:toggleTable2</code>	Toggles table 2 visibility
<code>script:toggleComparisonTable2</code>	Toggles comparison table 2 visibility
<code>script:toggleLegend2</code>	Toggles legend 2 visibility
<code>script:toggleDataExplorer2</code>	Toggles data explorer 2 visibility
<code>script:toggleDataExplorer3</code>	Toggles data explorer 3 visibility
<code>script:toggleDataExplorer4</code>	Toggles data explorer 4 visibility
<code>script:toggleFilterExplorer2</code>	Toggles filter explorer 2 visibility
<code>script:openPrintWin</code>	Opens print window
<code>script:openExportWin</code>	Opens export window (requires Flash Player 10)
<code>script:openAboutWin</code>	Opens about window
<code>script:openNotesPage</code>	Opens notes page of the active indicator

<code>script:openNotesPage2</code>	Opens notes page of the active indicator in Map 2
<code>script:clearSelection</code>	Clears current selection
<code>script:clearComparisonSelection</code>	Clears comparison selection
<code>script:clearFilter</code>	Clears current filter
<code>script:resetlayout</code>	Resets report layout
<code>script:toggleLegendWindow</code>	Opens legend settings window
<code>script:toggleLegendWindow2</code>	Opens legend settings window 2
<code>script:copyToClipboard</code>	Copies the content of the table into the clipboard
<code>script:copyToClipboard2</code>	Copies the content of the table 2 into the clipboard

You can also call multiple ActionScript functions using a semicolon delimited list.

Example: `script:toggleDataExplorer;toggleFilterExplorer`

In reports published using an HTML template you can use the following JavaScript functions to toggle the report components:

```
javascript:iaToggle(map)
javascript:iaToggle(timeSeries)
javascript:iaToggle(discreteTimeSeries)
javascript:iaToggle(barChart)
javascript:iaToggle(boxAndWhisker)
javascript:iaToggle(pieChart)
javascript:iaToggle(advancedPieChart)
```



```

javascript:iaToggle(metadata)
javascript:iaToggle(table)
javascript:iaToggle(comparisonTable)
javascript:iaToggle(legend)
javascript:iaToggle(featureLegend)
javascript:iaToggle(dataExplorer)
javascript:iaToggle(filterExplorer)
javascript:iaToggle(geogExplorer)
javascript:iaToggle(scatterPlot)
javascript:iaToggle(statsbox)
javascript:iaToggle(menuBar)
javascript:iaToggle(spineChart)
javascript:iaToggle(profileLegend)
javascript:iaToggle(timeControl)
javascript:iaToggle(pyramidChart)
javascript:iaToggle(pyramidLegend)
javascript:iaToggle(featureCard)

javascript:iaToggle(map2)
javascript:iaToggle(timeSeries2)
javascript:iaToggle(discreteTimeSeries2)
javascript:iaToggle(barChart2)
javascript:iaToggle(boxAndWhisker2)
javascript:iaToggle(pieChart2)
javascript:iaToggle(advancedPieChart2)
javascript:iaToggle(metadata2)
javascript:iaToggle(table2)
javascript:iaToggle(comparisonTable2)

```

```

javascript:iaToggle(dataExplorer2)
javascript:iaToggle(dataExplorer3)
javascript:iaToggle(dataExplorer4)
javascript:iaToggle(filterExplorer2)
javascript:iaToggle(statsbox2)

```

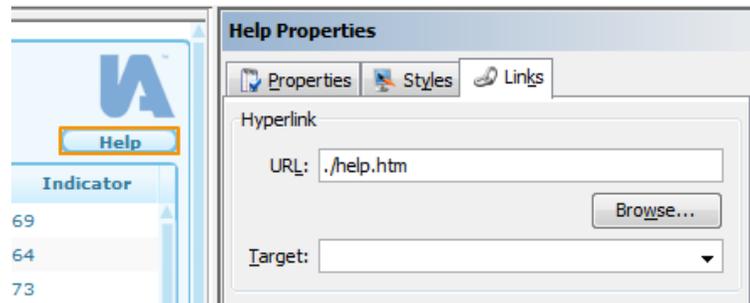
Other JavaScript functions:

javascript:iaOpenPrintPreview()	Opens print preview window
javascript:iaToggleShare()	Opens the Share dialog pop-up
javascript:iaToggleProfileTree()	Expands or collapses the themes in the Area Profile
javascript:iaTogglePopup(...)	opens a file in a pop-up window, enter file path into the brackets

The 'Help' button is the only default button in a Flash report for which the URL does not contain a JavaScript command (Figure 70). If you wish to edit the link for the 'Help' button, simply replace './help.htm' with a new link. So your new entry in the 'URL' box might read 'http://www.instantatlas.com' to link to the InstantAtlas website homepage for example.



Figure 70



Note that if you intend to move the report folder at a later stage, we recommend you put all the files you are linking to into the report folder and use relative pathnames to link to them. The relative pathname for any file located in the report folder is './'. So if you wanted your button to link to a PDF called my\_file.pdf located in the report folder, you would type './my\_file.pdf' into the URL box.

The Target value can be selected from the pick list by clicking the down arrow. This determines how the file being linked to will open.

Target Value	File being linked to opens in...
_blank	A new window
_self	The same window as the report (replaces the report)
_parent	For use in a framed environment. Will open in the parent frame
_top	For use in a framed environment. Will open in the top frame

In reports published using an HTML template, the Help link is by default not set up as a standard button but as an item in the Menu Bar component. If you prefer this to be a button you can simply insert a custom button and enter './help.htm' or the link to your own help file in the button URL.

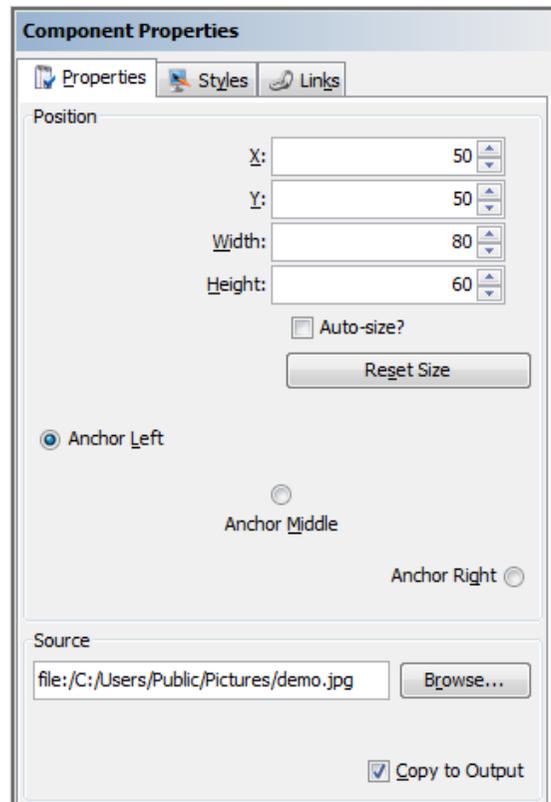
All JavaScript functions mentioned above for use within a HTML dynamic report can be used either within a button or as a Menu Bar item.

#### C.4.3.3. Image Properties

If you select or insert an image component into the Designer canvas, the 'Image Properties' will appear in the properties pane (Figure 71).



Figure 71



This dialog features a 'Reset Size' button and 'Copy to Output' checkbox. Click the 'Reset Size' button to set the width and height values to the width and height in pixels of the original image. Click the 'Copy to Output' checkbox if you wish the image you are inserting to be copied into the report folder. You should do this if you intend to move the report folder at a later stage.

If the 'Auto-size?' option is ticked, the image will rescale together with the browser window. With images, however, this may cause a loss of quality. We therefore recommend inserting SWF files as these will rescale without

loss of quality. If you would like to keep the image in its set size you should disable the auto-size option.

Using 'Anchor Left', 'Anchor Middle' and 'Anchor Right', you can define where the image is anchored in the report. For example, if you want your image to be positioned on the right hand border and unaffected by the browser window size, you would choose the 'Anchor Right' option.

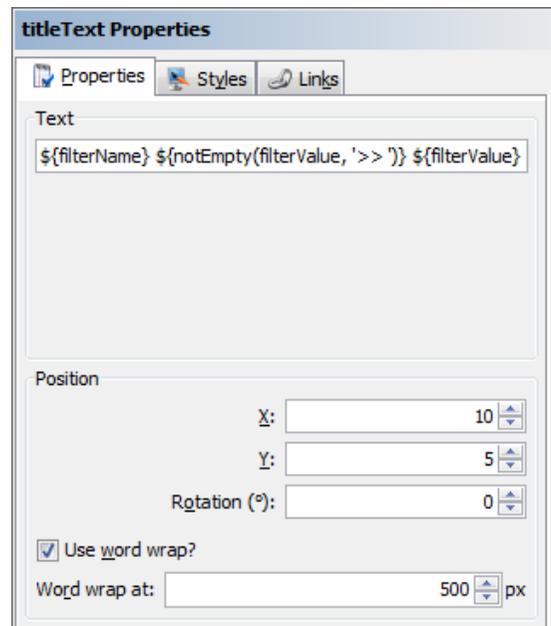
To move the image around you can either use the X and Y fields in the 'Properties' tab or you can click the image in the canvas to select it and drag it to the desired location. If necessary, you can resize it by dragging the selection handles.

#### C.4.3.4. Text Properties

If you view the properties for a text component (e.g. the report title), you will see that you can specify a rotation value in degrees for display of the text in the report (Figure 72). You will also see a 'Use word wrap?' checkbox and 'Word wrap at' box. If you select the 'Use word wrap?' checkbox you will then be able to enter a value into the 'Word wrap at' box. This determines how far to the right text will run before wrapping onto a new line.



Figure 72



You will notice that some text components contain dynamic variables enclosed with `{}`. Any text that is not enclosed in `{}` is static. Dynamic variables (along with the logic tests discussed below) do bring a lot of flexibility to the look and feel of reports.

In reports published using an HTML template, dynamic text can also be placed in the title bars of the components or in the table column headers.

Figure 72 shows the properties for the Title component in a Single Map Flash template. Clearly, the title will not be displayed in the report as `${themeName} >> ${indicatorName} ${notEmpty(date, '>>')} ${date}`

`${notEmpty(filterName, '>> Filter: ')} ${filterName} ${notEmpty(filterValue, '>>')} ${filterValue}`.

Rather, it might be displayed as shown in Figure 73.

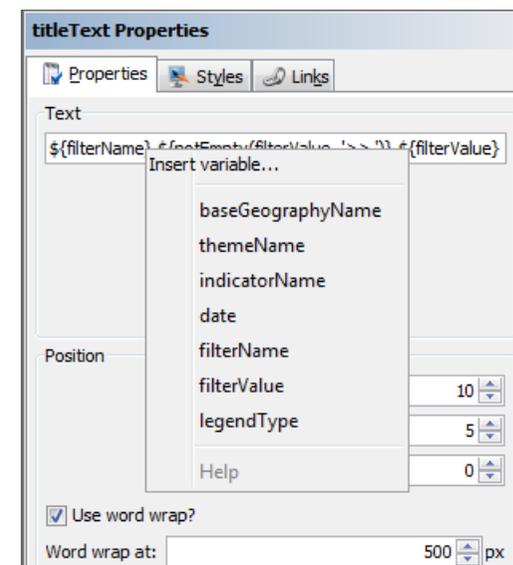
Figure 73



You can see that in this case, `themeName` resolves as 'Social deprivation', `indicatorName` as '% of population unemployed', `date` as '2005', `filterName` as 'Zones' and `filterValue` as 'Edinburgh South'.

You can edit the static text and can also add and delete dynamic variables. Right click in the 'Text' box of the dialog to view the list of dynamic variables available (Figure 74).

Figure 74



Hold your mouse pointer over each of the variable names to view a description. Click on a variable to insert it into the 'Text' box.

For the Title component in a Single Map template there are also some logic tests involved. The first logic test is:

```
${notEmpty(date, '>> ')}
```

In plain English this translates as the following:

"If, and only if, the value for date is not null and is not an empty bit of text, then write out the following text..."

So, the rule for this type of dynamic text entry is:

```
${test(condition, textIfConditionIsTrue)}
```

Another example involving the same logic test is the Scatter Plot component text:

```
"${notEmpty(scatterplotCorrelation, 'Correlation coefficient (r) = ' +
scatterplotCorrelation + ' >> r-squared = ' + scatterplotRSquare + ',
Regression Equation: y = ' + scatterplotGradient + 'x + ' +
scatterplotIntercept)}"
```

Note that the textIfConditionIsTrue part is "raw" (i.e. it's the JavaScript code that will be evaluated if the condition is true). So, in this case, you need to parcel up the dynamic variables scatterplotCorrelation, scatterplotRSquare, scatterplotGradient and scatterplotIntercept using the + operator and put static text in quotes.

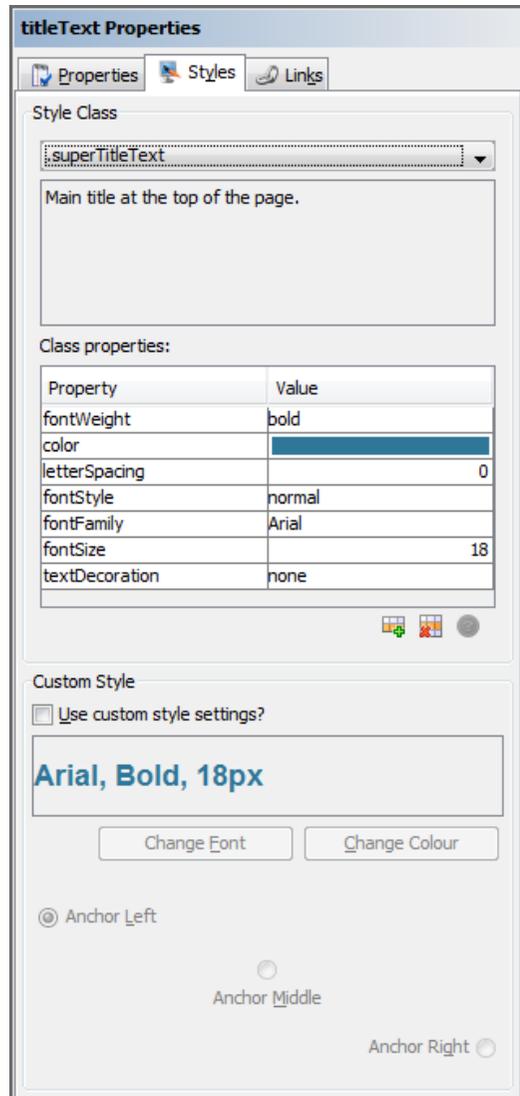
The available logic tests are:

- empty - `${empty(variable, textIfEmpty)}`
- notEmpty - `${notEmpty(variable, textIfNotEmpty)}`
- equals - `${equals(variable, 'test text', textIfEqual)}`
- notEquals - `${notEquals(variable, 'test text', textIfNotEqual)}`

If you click the 'Styles' tab for a text component, the name of any pre-defined style class controlling the appearance of the text will be listed in the 'Style Class' box (Figure 75).



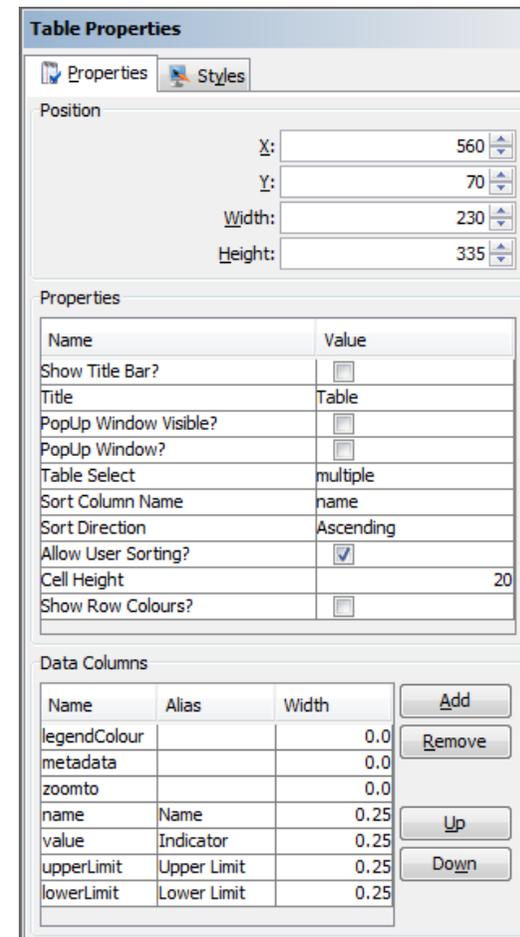
Figure 75



### C.4.3.5. Table Properties

If you view the properties for a table component, you will see a 'Data Columns' section (Figure 76). This enables you to add or remove columns from the data table in your report. You can add a column by clicking the 'Add' button and remove a column by clicking it in the list to highlight it and clicking the 'Remove' button.

Figure 76



For Flash reports, the columns that are displayed in the Data Table by default are the three symbol columns with the legend colour, the notes icon (metadata) and the magnifying glass (zoom to) as well as the columns for the name of the base geography feature and the indicator value. You may remove any of these. If you want to add these columns back in again, however, make sure that the column names are written exactly as in Figure 76.

In reports published using an HTML template, the data table contains two columns by default: the name of the base geography feature (which includes the legend colour symbol and notes icon if metadata links have been included in the data) and the indicator value. Settings for having the map zoom to a selected feature (replaces the magnifying glass) and for displaying the legend colour in the table can be found in the 'Properties' section above the 'Data Columns' section.

Extra columns are typically added in order to display any associate values that you have added to the data files for your report (please refer to section 'E. The InstantAtlas Excel Data Manager', sub-section 'E.5.2. Entering Associate Values' for more information on associates). If you have no associate values in the data files for your report, there is no point in adding new columns to the table as there will be nothing to display in these columns. If you do have associate values in your data files, you can add columns to your table to display them. The name value for a column should exactly match the name for the associate values in the data file(s) for the report (except for confidence intervals – see below).

For example, Figure 77 shows an Excel workbook with two sets of associate values for Indicator 1, the names of which are given in cells D5 and E5. If you add these columns to the data table in order to display these associate values, the name values in the Designer for the columns would have to be 'count' and 'rank' (i.e. exactly match the contents of cells D5 and E5). The alias value is displayed as the column heading in the report data table – you can enter any text you like for the alias.

Figure 77

	A	B	C	D	E	F
1			Theme 1			
2			Indicator 1			
3			notes.htm			
4			numeric			
5	Codes	Names	2001	count	rank	
6	S1	Area 1	64.88	670417	40	
7	S10	Area 2	67.04	1132966	39	
8	S100	Area 3	68.03	724760	38	
9	S101	Area 4	68.73	854965	37	
10	S102	Area 5	72.48	829085	36	
11	S103	Area 6	73.68	869232	35	
12	S104	Area 7	74.63	841827	34	

Confidence intervals are a special case. These are called 'll' and 'ul' in the data files for dynamic reports. In the Designer, however, these columns must be given name values of 'lowerLimit' and 'upperLimit' as shown in Figure 76.



Other important table properties in the HTML templates are:

#### Exportable?

If this box is ticked you will see an export button in the top right hand corner of the table when you hover with the mouse over it. Clicking this button will open a new browser tab/window in which you will be able to copy and paste the data in a comma delimited CSV format.

#### Zoom On Selection?

If this box is ticked the map will zoom to the feature which gets selected in the data table

#### Show Legend Colour?

If you do not wish to see circles with the legend colour of each feature in the table you can untick this checkbox.

### C.4.3.6. Map Properties

#### Pre-load Contextual Layers?

By default, the contextual layers in a Flash report only load at the point where the toggle box for a layer is clicked in the Map Layers box. However, it is possible to configure a Flash report so that contextual layers are pre-loaded (i.e. the vector graphics are loaded in when the report initially loads. This, however, does not necessarily mean that the layers will also be visible in the map by default. It simply means that the report 'knows' the vector graphic when the report is opened. You will need to

ensure that contextual layers are pre-loaded if you are implementing filter map zooms (i.e. you have linked filter values to polygons in your contextual layers so that applying a filter in the report zooms in the map). Simply check the 'Pre-load Contextual Layers?' box in the Map Properties in the Designer.

The config.xml file of an HTML template does not currently include this property. This means that if you have set up filters that should zoom to the filtered areas, the map will only zoom if the relevant contextual layer is either visible when opening the report or after it has been toggled on.

#### Visible Contextual Layers List

If you wish contextual layers to be visible (i.e. switched on in the Map Layers box) when a report opens you must edit the 'Visible Contextual Layers List' property. When you click the 'Value' column for this property a popup window will appear. The vector contextual layers in a report have IDs of contextualLayer1.swf, contextualLayer2.swf, contextualLayer3.swf and so on. If you wish the lowermost layer in the vertical stack (i.e. contextualLayer1.swf) to be visible by default you enter the value 'contextualLayer1' for the 'Visible Contextual Layers List' property. If you want the lowermost two layers to be visible by default you enter the value 'contextualLayer1,contextualLayer2' and so on. If you are unsure of the contextual layer 'id' you wish to make visible by default you can refer to the map.swf.xml file in the output folder of your dynamic report. This file can be viewed using a text editor (e.g. Textpad). Contextual layers will have an entry in map.swf.xml similar to the following:



```
<contextual-layer
xmlns="http://swf.instantatlas.com/supplement"
id="contextualLayer1" name = "Post code districts"
geometry="polygon" src="contextualLayer1.swf">
```

When using an HTML template the visibility of map layers is set in the layer properties in the Publisher. After the report has been published you can change these settings by editing the map.js file in a text editor.

### Show Background Mapping

You can also make background mapping layers visible by default by ticking the box of the 'Show Background Mapping' property.

When using an HTML template background layers are switched on by default. After the report has been published you can change this by editing the map.js file in a text editor.

### Background Folder

If you are using a background image collection as your background layer and you want to keep the background images saved in a different location than your report files, you can define the path to the folder which includes the background images in the property 'Background Folder'.

### Base Layer Data

If you want the map to show the values of an associate column instead of the indicator value by default you can define this in the property called 'Base Layer Data'. Make sure that the name you type in here is identical to the associate column name in the data.xml file.

When using an HTML template you can change the data which is loaded into the map and legend in the General Properties. This setting is called 'Data'.

### Map Copyright

If you use Map data which requires a copyright reference, please do not forget to write this in the 'Map Copyright' property.

### List of Layers Displaying Tips

If you wish to show a tooltip for your contextual layers displaying e.g. the name of the geographic feature, you can do this by editing the 'List of Layers Displaying Tips' property. When you click the 'Value' column for this property a popup window will appear. This property needs to contain the IDs of all contextual layers for which you would like to enable tips. You can find the IDs listed in the map.swf.xml file in the output folder of your dynamic report. This file can be viewed using a text editor (e.g. Textpad). Contextual layers will have an entry in map.swf.xml similar to the following:

```
<contextual-layer
xmlns="http://swf.instantatlas.com/supplement"
```



```
id="contextualLayer1" name = "Post code districts"
geometry="polygon" src="contextualLayer1.swf">
```

Please note that prior to version 6.5.0 the values displayed in the tooltips were the values of the Feature **Code** Field that you set in the Publisher when adding the contextual layer. From 6.5.0 onwards the tooltips will display the values of the Feature **Name** Field.

When using an HTML template, the tooltips for map layers are switched on and off in the layer properties in the Publisher. After the report has been published you can change these settings by editing the map.js file in a text editor.

### List of Layers Displaying Labels

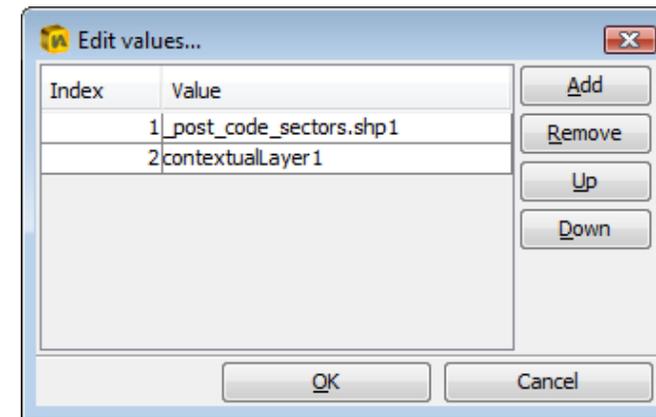
If you wish to show permanent labels in the map for the base or contextual layers you should edit the 'List of Layers Displaying Labels' property. This is a list of the IDs of the layers you wish to display labels permanently in the map. You can find the IDs listed in the map.swf.xml file in the output folder of your dynamic report. This file can be viewed using a text editor such as Notepad or Textpad. For example, in the snippet of code below taken from a map.swf.xml file you can see that the ID for the base geography is '\_post\_code\_sectors.shp1' and the ID for the only contextual layer is 'contextualLayer1'.

```
<base-layer
xmlns="http://swf.instantatlas.com/supplement"
id="_post_code_sectors.shp1"
```

```
name="post_code_sectors.shp" geometry="polygon"
src="map1.swf">
</base-layer>
<contextual-layer
xmlns="http://swf.instantatlas.com/supplement"
id="contextualLayer1" name="post_code_districts.shp"
geometry="polygon" src="contextualLayer1.swf">
```

If you wish both of these layers to show labels, the list in the popup window should look like that shown below (Figure 78).

Figure 78



Please note that prior to version 6.5.0 the values displayed in the labels were the values of the Feature **Code** Field which you chose in the Publisher when adding the contextual layer. From 6.5.0 onwards the labels will display the values of the Feature **Name** Field.



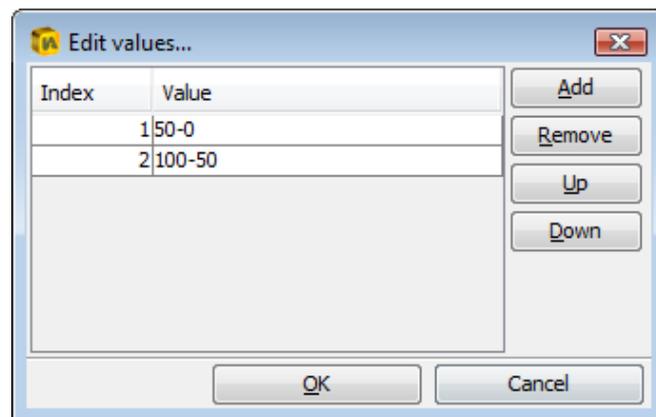
When using an HTML template, the labels for map layers are switched on and off in the layer properties in the Publisher. After the report has been published you can change these settings by editing the map.js file in a text editor.

When using an HTML template, the display ranges for map layer labels are set in the layer properties in the Publisher. After the report has been published you can change these settings by editing the map.js file in a text editor.

### List of Display Ranges For Labelled Layers

You can control the extent ranges for which the labels will show by editing the 'List of Display Ranges For Labelled Layers' property. The ranges should be entered as percentages of the full map extent and should be in the format [upper limit]-[lower limit]. Following on from the last example, if you wanted the base layer to show labels in the 50-0% extent range of the map and the contextual layer to show labels in the 100-50% range your popup window would look like that shown below (Figure 79).

Figure 79



### Show Layers In Legend

If you do not wish to see the list of contextual layers and background layers in the legend, you can hide them by un-ticking the property 'Show Layers In Legend'.

### Contextual Layers Displayed In Legend

If you want to only show one or a subset of the contextual layers in the legend, you should keep the 'Show Layers In Legend' property ticked and then define which layer(s) you wish to see in the legend by entering their ID(s) into the property 'Contextual Layers Displayed In Legend'.

When using an HTML template, the visibility of map layers in the legend is set in the layer properties in the Publisher. After the report has been published you can change these settings by editing the map.js file in a text editor.

### Tip

This property contains the code for the tooltip you see when you hover over the map features. By default this code looks like this for Flash reports:



```
<p>${featureName}: ${indicatorValue}</p>
```

The `<p>...</p>` indicates that it is HTML code (the `<p>`-tag stands for a paragraph)

`${featureName}` and `${indicatorValue}` are substitution variables. Their values are dynamic and change depending on the map feature you mouse over.

The colon in between the variables is static text. Figure 80 shows how the default tooltip looks for the post code sector with the name 'EH14 7'.

Figure 80



In the config.xml file of an HTML template, the default code of the Tip property does not include the paragraph tags (`<p>...</p>`):

```
${featureName}: ${indicatorValue}
```

You can add any other static text, substitution variables or HTML tags if you like.

Example 1:

```
<p>${featureName}: ${indicatorValue}</p><p>Count:
${count}</p>
```

In addition to the default area name and indicator value, this code adds another paragraph (starting on a new line) with 'Count: ' as a static text and the associate with the name 'count' as a dynamic value (Figure 81).

Figure 81



Example 2:

```
<p>${featureName}: ${count}</p>
```

This will replace the indicator value with the count associate (Figure 82).

Figure 82



Other important map properties in the HTML templates are:

#### Exportable?

If this box is ticked you will see an export button in the top right hand corner of the map when you hover with the mouse over it. Clicking this button will open the map graphic (without background layers) as an image in a new tab/window of your browser. From there you can save the image through the right-click menu.



### Max Zoom Allowed and Min Zoom Allowed

Using these properties you can define zoom limits for your map. The values need to be in map units, e.g. Max Zoom Allowed: 500000, Min Zoom Allowed: 10000000. When using Google Maps as a background layer, you will need to specify zoom levels instead. Possible zoom level values are 0 – 21, where 0 is the level furthest zoomed out and 21 is the level furthest zoomed in, e.g. Max Zoom Allowed: 15, Min Zoom Allowed: 5.

#### C.4.3.7. Bar Chart Properties

##### Y-Axis Data

Similar to the map component you can also set the bar chart to display values from a column other than the indicator column. To do this, type in the name of the associate column into the property 'Y-Axis Data' in the Bar Chart Properties.

To sort the bars according to the new data source you can set the properties 'Chart Sort Data' and 'Chart Sort Direction' in the General Properties in the Property group 'Data Formatting'.

In the config.xml file an HTML template this property is called 'Data'. Once you set this to pick up an associate value the bars will sort by this associate. The Sort Direction can be set in the Bar Chart Properties.

##### X-Axis Label and Y-Axis Label

If you wish to show labels along the X and Y-Axis you can also define this in the Bar Chart Properties.

##### Show Limits?

To show or hide the error bars on the bar chart (assuming the data.xml file is inclusive of these values) tick or untick the check box of the 'Show Limits?' property.

The config.xml file of an HTML template does not currently include this property.

##### Tip

This property contains the code for the tooltip you see when you hover over the bars. By default this code looks like this:

```
<p>${featureName}: ${indicatorValue}</p>
${notEmpty(lowerLimit, '<p>LL: ')}${lowerLimit}
${notEmpty(lowerLimit, '</p>')}
${notEmpty(upperLimit, '<p>UL: ')}${upperLimit}
${notEmpty(upperLimit, '</p>')}
```

This code means that the first line of the tooltip is the feature name and the indicator value of the hovered bar. In case that your data contains confidence intervals, two further paragraphs will be added. Both new lines begin with a static text ('LL: ' for lower limit and 'UL: ' for upper limit) followed by the respective dynamic variable (Figure 83).



Figure 83



In the config.xml file of an HTML template, the default code of the Tip property does not include the paragraph tags:

```
${featureName}: ${indicatorValue}
${notEmpty(lowerLimit, '<br/>LL: ')}${lowerLimit}
${notEmpty(upperLimit, '<br/>UL: ')}${upperLimit}
```

You can modify this code or add any other static text, substitution variables or HTML tags. Please refer to the 'Tip' section of the Map Properties for further information and examples.

Other important bar chart properties in the HTML templates are:

#### Exportable?

If this box is ticked you will see an export button in the top right hand corner of the bar chart when you hover it with the mouse. Clicking this button will open the bar chart graphic as an image in a new tab/window of your browser. From there you can save the image through the right-click menu.

#### Orientation

You can set the orientation of the bars to be vertical or horizontal. For this reason the Single Map (HTML Edition) Template does not include a separate 'Flipped Bar Chart' component.

#### Match Axis to Data?

By default the data axis of the bar chart will show values rounded to the next logical interval. If you tick this property the minimum and maximum value of the data axis will be the same as the minimum and maximum value of the selected indicator/time period.

#### Use Fixed Values?, Fixed Minimum Value and Fixed Maximum Value

You can define fixed minimum and maximum values for the bar chart - however these settings will apply to the whole report. If you wish to define fixed values on a theme, indicator or time period basis you should do it through the Metadata of your data files. Please refer to section 'E.6.2.4 Setting the Chart Axis Minimum and Maximum'.

#### C.4.3.8. Time Series Chart Properties

#### Y-Axis Data

Similar to the map and the bar chart components you can also set the time series chart to display values from a column other than the indicator



column. To do this type in the name of the associate column into the property 'Y-Axis Data' of the Time Series Chart Properties.

In the config.xml file of an HTML template this property is called 'Data'.

### **X-Axis Label and Y-Axis Label**

If you wish to show labels along the X and Y-Axis you can also define this in the Time Series Chart Properties.

### **Max No Series**

By default the Time Series Chart will show not more than ten time series trend lines at the same time. You can adjust this maximum number in the 'Max No Series' property. Please be aware, however, that allowing a large number of time series lines to show simultaneously in the Time Series Chart could have a negative effect on the performance of your dynamic report.

The config.xml file of an HTML template does not currently include this property. You can limit the number of selectable features for all components in the General Properties.

Other important time series chart properties in the HTML template are:

### **Exportable?**

If this box is ticked you will see an export button in the top right hand corner of the bar chart when you hover it with the mouse. Clicking this button will open the time series chart graphic as an image in a new tab/window of your browser. From there you can save the image through the right-click menu.

### **Orientation**

You can set the orientation of the time series chart to be vertical or horizontal. For this reason the Single Map (HTML Edition) Template does not include a separate 'Flipped Time Series Chart' component.

### **Match Axis to Data?**

By default the data axis of the time series chart will show values rounded to the next logical interval. If you tick this property the minimum and maximum value of the data axis will be the same as the minimum and maximum value of the selected indicator/time period.

### **Use Fixed Values?, Fixed Minimum Value and Fixed Maximum Value**

You can define fixed minimum and maximum values for the time series chart - however these settings will apply to the whole report. If



you wish to define fixed values on a theme, indicator or time period basis you should do it through the Metadata of your data files. Please refer to section 'E.6.2.4 Setting the Chart Axis Minimum and Maximum'.

### C.4.3.9. Advanced Pie Chart Properties

The Advanced Pie Chart is not visible by default – you must first insert this using the 'Insert' menu (see section 'C.3.1.4. Insert'). Once you have inserted it, you can select it to display the properties (Figure 84).

Figure 84

Name	Value
Show Title Bar?	<input type="checkbox"/>
Title	Advanced Pie Chart
PopUp Window Visible?	<input type="checkbox"/>
PopUp Window?	<input type="checkbox"/>
Data Source	indicator
List Of Associates To Ignore	
Chart Layout	horizontal
Chart 1 Interaction Mode	both
Chart 1 Text	
Include Chart 2?	<input checked="" type="checkbox"/>
Chart 2 Interaction Mode	both
Chart 2 Text	

The properties that require explanation are described below.

#### Data Source

This can be either 'indicator' or 'associate'. If 'indicator' is selected, the pie chart(s) will show data for all the indicators in the active theme. So if you view an indicator called 'Male Population' in your report and this belongs to a theme called 'Demographics' then the pie chart will display a slice for each of the indicators in the 'Demographics' theme.

If 'associate' is selected, the pie chart(s) will show data for the associates of the active indicator. So if you view an indicator called 'Male Population' in your report then the pie chart will display a slice for each of the associates of this indicator.

#### List Of Associates To Ignore

When the 'Data Source' property is set to 'associate', by default all associate columns of the selected indicator will be part of the Advance Pie Chart. However, the categories for the Advanced Pie Chart should always add up to a logical total. If you would like to include additional associates into your report which do not belong to the logical total but which you might wish to display in the data table, you can add them to the 'List of Associates To Ignore'. These associates will then not be included into the Advanced Pie Chart.



There is a dedicated guide about the Advanced Pie Chart available. Please contact your support provider for further information.



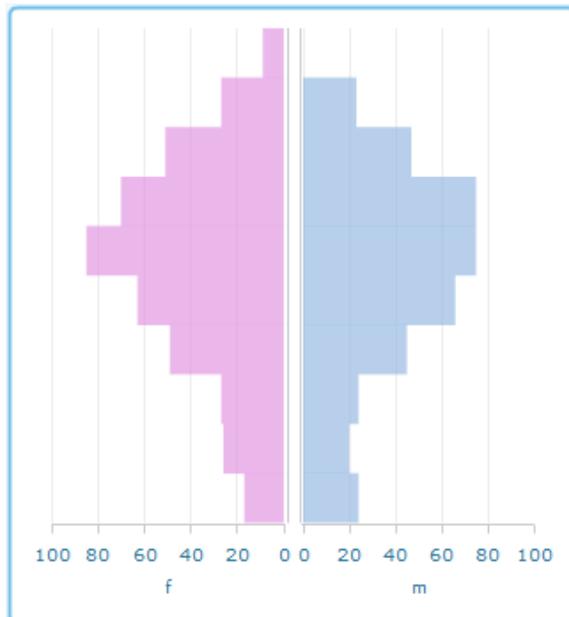
### C.4.3.10. Pyramid Chart Properties

There is a dedicated Population Pyramid (HTML Edition) Template available (licenced together with the Single Map template) which is the only one of the HTML templates that includes the Pyramid Chart.

Within the Flash template family the Pyramid Chart is currently only available in the Single Map Template. However, it is not visible by default – you must insert it using the ‘Insert’ menu (see section ‘C.3.1.4. Insert’).

The Pyramid Chart displays indicator data belonging to one map feature in a back-to-back horizontal bar chart. This chart is typically used to show population structure broken down by age groups and gender (Figure 85).

Figure 85



### Axis Labels

By default the axis labels are ‘m’ for male on the right side of the chart x-axis and ‘f’ for female on the left side of the chart x-axis. You can change these labels to whatever you like.

In the Population Pyramid (HTML Edition) template the default axis labels are ‘Males’ and ‘Females’ but they can be changed using the properties ‘Male Label’ and ‘Female Label’.

### X-Axis Minimum and Maximum

The property ‘Use X-Axis Min and Max’ gives you the option to either have the chart x-axis adjust to the values it displays or to always force it between two fixed values. If ‘Use X-Axis Min and Max’ is ticked the chart will use the values of ‘X-Axis Minimum’ and ‘X-Axis Maximum’ to constrain the chart x-axis.

In the Population Pyramid (HTML Edition) template it is only possible to set the ‘Fixed Maximum Value’ as it is assumed that the bars should always start at zero. This setting is applied if ‘Use Fixed Values’ is ticked.

### Show Comparison Data

You should enable this property if you wish to see a permanent comparison line in the chart for all comparison features. If this property is



disabled, the user will still be able to toggle the comparison lines on by selecting the comparison features from the Comparison Table.

In the Population Pyramid (HTML Edition) template this setting is called 'Always show Comparison Data'.

In the Population Pyramid (HTML Edition) template it is possible to show data from up to 3 associate columns as lines in the chart. For each you can define the 'Value' (which is the data source and should contain the name of the associate column), the 'Colour' of the line and the 'Label' which appears in the Pyramid Legend.



There is a dedicated guide about the Pyramid Chart available. Please contact your support provider for further information.

#### C.4.3.11. Dot Plot Properties

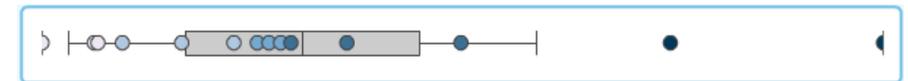
The HTML templates do not currently include the Dot Plot component.

The Dot Plot is currently only available in the Single Map (Flash Edition) Template. However, it is not visible by default – you must insert it using the 'Insert' menu (see section 'C.3.1.4. Insert').

The Dot Plot shows the spread of the indicator data around the mean or median. Each dot represents the indicator value of one map feature. The

dot representing the minimum indicator value is always displayed to the very left of the chart. The dot for the maximum indicator value is displayed to the very right of the chart. The dots are superimposed over a grey shaded box with whiskers (Figure 86). The meaning of the vertical box borders and the length of the whiskers depends on the 'Chart Type' settings you choose in the config.xml file.

Figure 86



#### Chart Type 'distribution'

The default 'Chart Type' setting is 'distribution'. Using this option, the vertical box borders and whiskers mean the following:

Left whisker:	-1 standard deviation
Left border of the box:	-0.5 standard deviation
Vertical line in the box:	The mean of the indicator values
Right border of the box:	+0.5 standard deviation
Right whisker:	+1 standard deviation

The text for the tool tip which appears when hovering over the grey shaded box is by default 'min | -1sd | -0.5sd | mean | 0.5sd | 1sd | max' but you can change this using the property 'Tip' in the config.xml file.

#### Chart Type 'interquartile'

When using the chart type 'interquartile', the grey shaded box represents the interquartile range. The vertical box borders and whiskers mean the following:



Left whisker:	5th Percentile
Left border of the box:	The lower quartile
Vertical line in the box:	The median of the indicator values
Right border of the box:	The upper quartile
Right whisker:	95th Percentile

The tool tip text will not change automatically when you change the 'Chart Type' property. So once you have chosen the 'interquartile' option you might want to change the 'Tip' property to something like this 'min | Q95 | LQ | median | UQ | Q95 | max'.

#### C.4.3.12. Statistics Box Properties

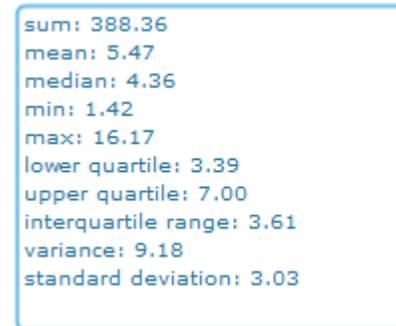
The Statistic Box is currently only available in the Single Map (Flash Edition) Template. However, it is not visible by default – you must insert it using the 'Insert' menu (see section 'C.3.1.4. Insert').

All released HTML templates include the Statistics Box component.

The Statistic Box shows several statistical figures calculated automatically from the indicator values of all feature in the report (Figure 87).

If a filter is applied the statistics will be calculated on-the-fly for just the filtered features. This works for a filter applied through the Filter Explorer and for geographic filters which can be applied by selecting a subset of the map features, right-clicking to open the context menu and select the 'Filter Selection' option.

Figure 87



The default statistics are the following:

Variable	Description	Formula
sum	The sum of the indicator values	$\sum x$
mean	The arithmetic mean of the indicator values	$\bar{x} = \frac{\sum x}{n}$



Variable	Description	Formula
median	The numeric value separating the higher half of the indicator values from the lower half.	If $x_1 < x_2 < x_3$ then: $m = x_2$ If $x_1 < x_2 < x_3 < x_4$ then: $m = \frac{x_2 + x_3}{2}$
min	The smallest indicator value	-
max	The largest indicator value	-
lower quartile	The 25th percentile. If the rank $r$ is not integer, the 'Linear Interpolation Between Closest Ranks' method is used.	$Q_1 = x_r$ with $r = \frac{1}{4}(n+1)$
upper quartile	The 75th percentile. If the rank $r$ is not integer, the 'Linear Interpolation Between Closest Ranks' method is used.	$Q_3 = x_r$ with $r = \frac{3}{4}(n+1)$
interquartile range	The difference between the upper and lower quartiles	$IQR = Q_3 - Q_1$
variance	A measure of the average distance between each of a set of data points and their mean value; equal to the sum of the squares of the deviation from the mean value.	$\sigma^2 = \frac{\sum (x - \bar{x})^2}{(n-1)}$
standard deviation	The square root of the variance in the units of variable	$\sigma = \sqrt{\frac{\sum (x - \bar{x})^2}{(n-1)}}$

The Statistics Box in the HTML templates also includes:

Variable	Description	Formula
range	The difference between the minimum and maximum values	$x_{\max} - x_{\min}$

The property 'Text' of the Statistic Component in the config.xml file allows you to amend the displayed statistical figures. By default the value of this property is:

```
<p>
  sum: ${sum} <br/>
  mean: ${mean} <br/>
  median: ${median} <br/>
  min: ${minValue} <br/>
  max: ${maxValue} <br/>
  lower quartile: ${lowerQuartile} <br/>
  upper quartile: ${upperQuartile} <br/>
  interquartile range: ${interquartileRange} <br/>
  variance: ${variance} <br/>
  standard deviation: ${standardDeviation}
</p>
```



The default value of the 'Text' property in an HTML report is:

```
sum: ${sum} <br/>
mean: ${mean} <br/>
median: ${median} <br/><br/>
min: ${minValue} <br/>
max: ${maxValue} <br/>
range: ${range} <br/><br/>
lower quartile: ${lowerQuartile} <br/>
upper quartile: ${upperQuartile} <br/>
interquartile range: ${interquartileRange}
<br/><br/>
variance: ${variance} <br/>
standard deviation: ${standardDeviation}
```

This text is HTML code that groups all statistical values into one paragraph `<p>...</p>`. The substitution variables, which hold the actual values, start with a dollar symbol and are enclosed in curly brackets like this: `${...}`. You can amend this text as you wish, for example by adding further static text or basic HTML commands (e.g. `<b>...</b>` would let the text between appear bold).

### C.4.3.13. Google Search Properties

The HTML templates do not include the Google Search as a separate component. A Search Tool can be enabled in the Map component which works either using the Google Maps search engine if you use Google Maps as a background layer or with the ArcGIS Online geocoding functionality if your map data is in the projection 'Web Mercator (Auxiliary Sphere)'.

The Google Search component is available in all Flash dynamic report templates. However, it is not visible by default – you must insert it using the 'Insert' menu (see section 'C.3.1.4. Insert').

The Google Search allows the end-user to search the map in an InstantAtlas report if it contains Google background mapping. Simply type into the text field a post code, street name or any other location. If the Google Search is able to find results within the spatial bounding box of the base layer (i.e. the geographic area of the report), it will display them in a drop down list underneath the text field (Figure 88).

Figure 88



Selecting an item out of the drop down list will centre the map on this location and a red marker will appear. Please note that this marker might be hidden behind the base layer or contextual layers. You can toggle map layers on and off by using the checkboxes in the Legend.

The results of the Google Search might improve significantly if the administrator adds an 'Appended Search Text' into the configuration properties in the Designer. This will ensure results are more relevant to the local area.

For example in a map with Edinburgh post code sectors, the Google Search will not be able to find the 'Botanic Garden' by default. This is because Google only returns a certain number of results it finds worldwide for the specified search term. These results are then filtered to only show those which lie inside the bounding box of the base layer. However, in the list returned by Google to the report, the Botanic Garden in Edinburgh is not included because there are too many results for Botanic Garden (all around the world). To ensure greater accuracy in the search results, the administrator is advised to choose an 'Appended Search Text' which is always added to the search term which the end-user enters into the text field.

We would recommend choosing as the 'Appended Search Text' a word or phrase which describes the area of your base geography. Using the Edinburgh post code sectors as an example, the word 'Edinburgh' would be suitable as this would ensure only results relevant to 'Edinburgh' are returned. If you have a map for the United Kingdom, then 'UK' would be a suitable 'Appended Search Text'.

If you wish that the Google Search text field contains already some descriptive text when the report loads, you can define this text in the 'Search Default Text' property. This could for example be 'Type your search term here...'

#### **C.4.3.14. Feature Card Properties**

The HTML templates Single Map, Population Pyramid, Election Results, Scatter Plot and Advanced Bubble Plot include a component called Feature Card. It shows an overview of the data for the selected feature(s) (Figure 89). It is highly customisable as its content is defined in HTML Format in the file called 'snippet.htm'.

InstantAtlas customers can find further information and examples on how the Feature Card component can be used in the IA Online Library (you will be asked to sign in to your 'My InstantAtlas' account):

<http://www.instantatlas.com/customers/support/library/desktop/tech-articles/html/feature-card>



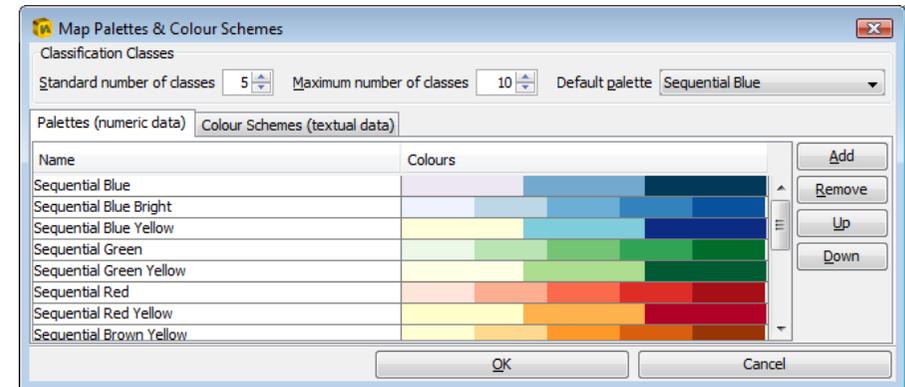
Figure 89

Feature profile for 2008	
<b>Devon</b>	
<b>Benefits</b>	
Attendance Allowance claimants (%) :	20.87
Disability Living Allowance claimants (%) :	8.1
Incapacity Benefit claimants (%) :	13.75
Income Support claimants (%) :	13.75
Jobseekers Allowance claimants (%) :	3
<b>Lambley</b>	
<b>Benefits</b>	
Attendance Allowance claimants (%) :	15.5
Disability Living Allowance claimants (%) :	4.17
Incapacity Benefit claimants (%) :	4.82
Income Support claimants (%) :	3.06
Jobseekers Allowance claimants (%) :	1.31

#### C.4.4. Editing Map Palettes

Click 'Palettes' if you wish to edit the palettes or colour schemes used to shade the maps in your dynamic reports. The 'Map Palettes & Colour Schemes' dialog will open (Figure 90).

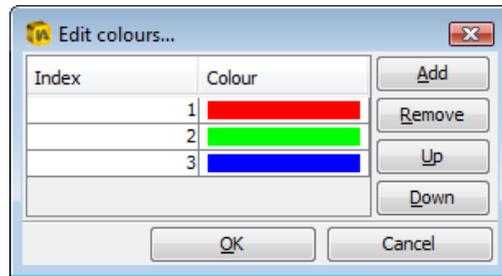
Figure 90



The 'Standard number of classes' box defines the number of classes shown in the Quantile, Equal Interval and Natural Breaks legends when your report opens. Similarly, the 'Maximum number of classes' box determines the maximum number of classes that can be displayed. Below these settings you will see that there are two tabs: 'Palettes (numeric data)' and 'Colour Schemes (textual data)'. The Palettes are used for numerical data and the Colour Schemes are used for categorical data.

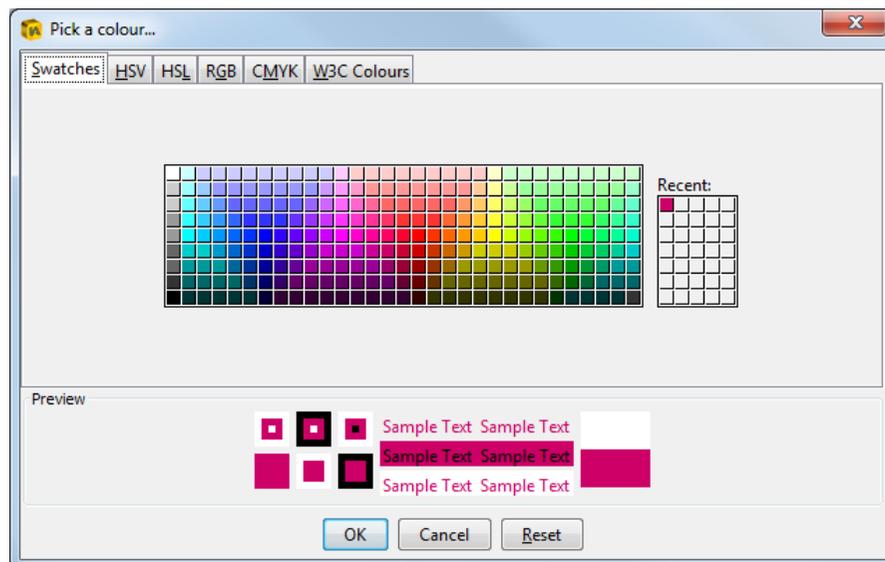
To add a palette, click the 'Add' button. To remove a palette, click its name in the 'Name' column to highlight it and click the 'Remove' button. To move a palette up or down, click its name in the 'Name' column to highlight it and click the 'Up' or 'Down' button. To edit the colours for a palette, simply click on the colour array in the 'Colours' column. The 'Edit colours' dialog will open (Figure 91).

Figure 91



Click the 'Add' button to add a colour. To remove a colour, click its cell in the 'Index' column to highlight it and click the 'Remove' button. To move a colour up or down in the order, click its cell in the 'Index' column to highlight it and then click the 'Up' or 'Down' button. If you add a colour, or click an existing colour, the 'Pick a colour' dialog will appear (Figure 92). You can use the options under any of the tabs to choose your colour.

Figure 92

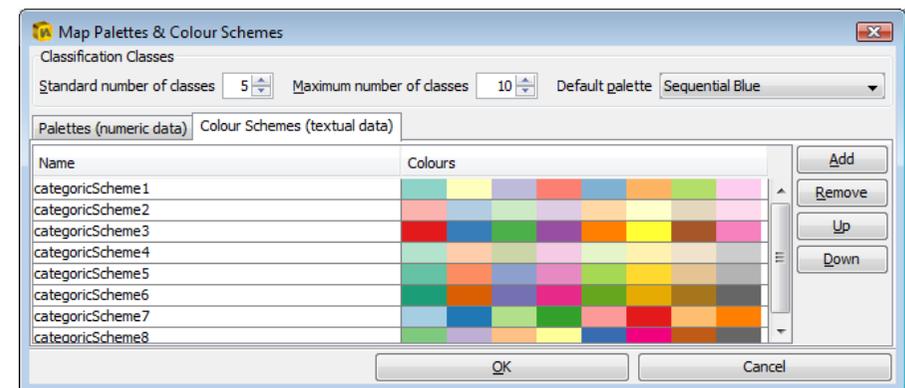


Click 'OK' when you are satisfied with your choice. Click 'Cancel' if you wish to discard your changes and close the dialog or 'Reset' if you wish to return to the original colour.

InstantAtlas reports will shade the map by interpolating between the first and last colours in the active palette if the number of classes displayed in the report exceeds the number of colours in the palette colour array.

Click the 'Colour Schemes (textual data)' tab to view the existing colour schemes (Figure 93). You can add and remove colour schemes and colours in exactly the same way as for palettes.

Figure 93



### C.4.5. Making a Component a Pop-up Window

All components in the report can either be permanently visible or work as a pop-up window which can be toggled on and off using a button. This section will describe the steps to modify a component to be a pop-up window. The bar chart of a Flash dynamic report will be used as an example.



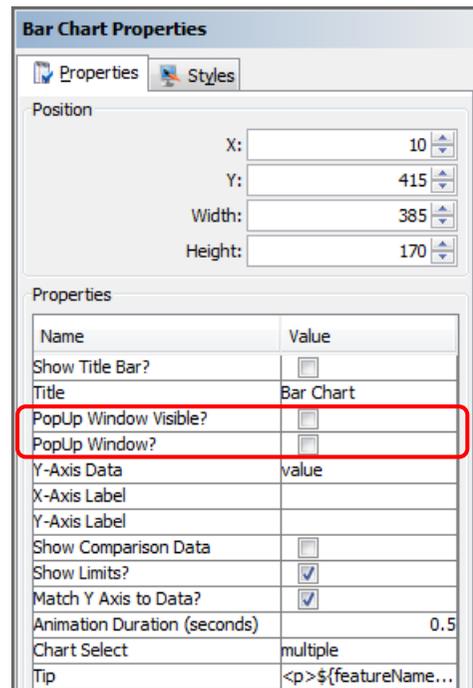
Click to select the bar chart component in the canvas and the 'Bar Chart Properties' will be displayed in the right hand panel. As with every other component in Flash dynamic reports, the bar chart has the two properties:

PopUp Window Visible?

PopUp Window?

Tick the 'PopUp Window?' checkbox to make the bar chart a pop-up. Use the 'PopUp Window Visible?' property to define whether the component should be visible or hidden when opening the report (Figure 94).

Figure 94



You should then insert a new button into your report. Select 'Insert', 'Button' from the menu bar, give the button a label and tooltip of your choice and select the 'Links' tab in the Properties Pane. Type 'script:toggleBarChart' into the URL field (Figure 95).

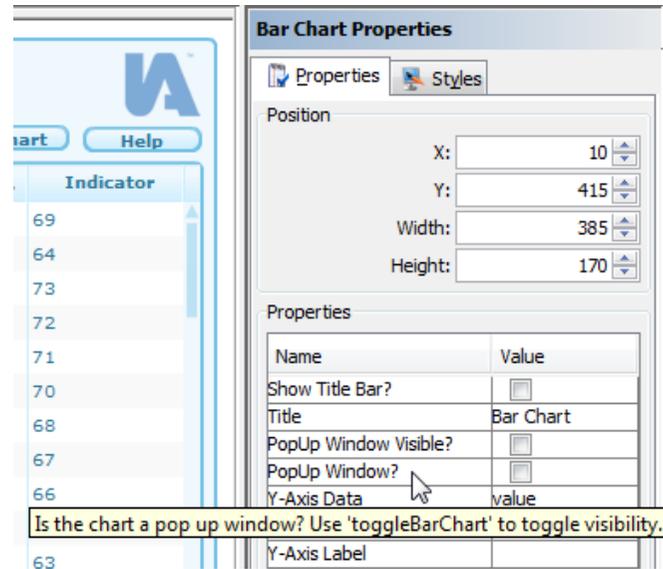
Figure 95



You can find out which script you need to use by hovering over the 'PopUp Window Visible?' or 'PopUp Window?' properties. The tooltips that appear include the ActionScript function (Figure 96).



Figure 96



You can find a full list of ActionScript functions in section 'C.4.3.2. Button Properties'.

In the config.xml file of an HTML template, each component can be toggled by a button without needing to change the properties of the component. You simply need to insert a button with the relevant JavaScript function (see section 'C.4.3.2. Button Properties'). However, you may want to define if the component is visible when the report is opened using the property 'Visible At Startup?'. You may also want the component to disappear when you click outside it with the mouse. This is done by ticking the box of the property 'PopUp Window?'. A component which has this property ticked is styled to show a drop shadow. Both properties are part of all report components.

## C.5. Applying a Design to Other Dynamic Reports

It is simple to apply a custom design to a series of InstantAtlas reports that you have published, even if the map and indicator data in each report is different. All you need to do is replace the existing config.xml file of the dynamic report you want to change with the config.xml file you have customised using the Designer.

 However, it is very important to realise that the configuration file is template-specific. You can only apply the same config.xml file to multiple dynamic reports if they were published using the same template.

For example, a series of dynamic reports published using the Single Map (Flash Edition) v6.5.0 template can share the same config.xml file. But applying this config.xml file to a dynamic report published using, for example, a Double Map v6.5.0 template is not supported and will almost certainly cause the report to malfunction.

Similarly, applying a config.xml file from a Flash dynamic report to an HTML dynamic report will cause it to malfunction.

We also do not recommend re-using a config.xml file between minor version changes e.g. applying a version 6.4.0 config.xml file to a 6.5.0 report. It might appear as if the report still works fine, however, you will not be able to find configuration settings which are necessary for the new functionality of the 6.5.0 report.

Customers of InstantAtlas can use the Configuration File Converter to update older config.xml files to a newer version. This tool is available within 'My InstantAtlas', the user restricted area of our website.



## D. THE INSTANTATLAS STYLE EDITOR

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## D.1. About this Section

The InstantAtlas Style Editor is a tool for changing the styles for an InstantAtlas dynamic report. The styles controls the way the various components in a report (map, data table, charts, etc.) look in terms of their background and border colours, borders widths and text fonts. The styles for a report are stored in a Cascading Style Sheet (.css) called 'default.css'. This is located with the other files that make up a dynamic report.

It is possible to change styles using the InstantAtlas Designer and we would normally recommend you make your style changes using the Designer. This is because the Designer will show you the styles that are used by each component. This makes it easier to know which style you should edit to achieve the desired effect.

However, you will need to opt for the Style Editor if you wish to do any of the following:

- View the full list of styles in default.css
- Add or delete CSS classes
- Carry out global style changes

## D.2. Starting the Style Editor

The Style Editor can be used as a stand-alone application to edit the style sheet for a report that has already been published. To open the Style Editor as a stand-alone application click 'InstantAtlas Desktop Edition', 'InstantAtlas Style Editor' in the Windows Start menu or click the 'InstantAtlas Style Editor' icon on your desktop. If you chose not to create shortcuts during installation of the software, browse to the 'InstantAtlasStyleEditor.exe' file (by default this will have been installed in 'C:\Program Files\GeoWise\InstantAtlas') and double click it. The Style Editor will open but the interface will remain empty until you open a report style sheet.

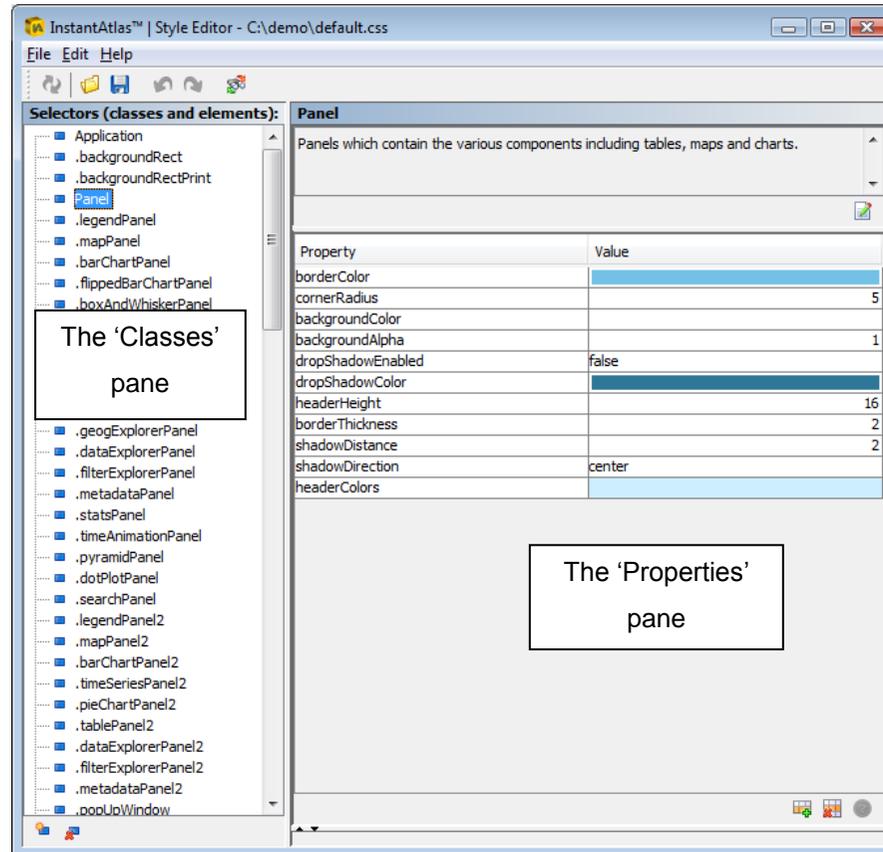
You can also right-click on the default.css file for a dynamic report you have published and choose the 'Edit with InstantAtlas Style Editor' option to start the Style Editor.



## D.3. The Style Editor Interface

The Style Editor interface consists of menus, a toolbar and two panes (Figure 97).

Figure 97



### D.3.1. The Menus and Toolbar

The menus and toolbar give you easy access to the Style Editor options. You can access a menu by clicking on it or holding down 'Alt' on your keyboard and pressing the underlined character in the menu name. For example, you can hold down 'Alt' and press 'F' to access the 'File' menu. If you hold your mouse pointer over an option in any of the drop down menus, a tooltip will appear. Similarly, if you hold your mouse pointer over an icon in the toolbar, a tooltip will appear. Note that if you open the Style Editor independently of the Designer, the 'Apply' option (first icon in the toolbar) will be greyed out – this is normal as 'Apply' is only relevant if you have opened the Style Editor from the Designer.

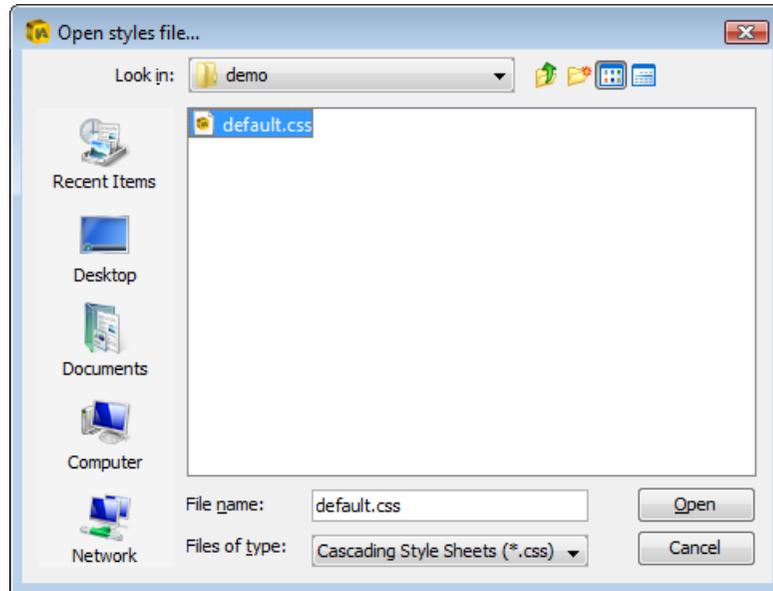
#### D.3.1.1. File

##### Open

Click 'Open' and the 'Open styles file...' dialog will appear (Figure 98). Alternatively hold down 'Ctrl' and press 'O' on your keyboard. Choose the style sheet (called 'default.css') for the report you wish to change and click 'Open'.



Figure 98



You will be warned if there is a problem with the style sheet you are trying to open and given the option to display a log file. E-mail the contents of the log file to your support provider.

### Save

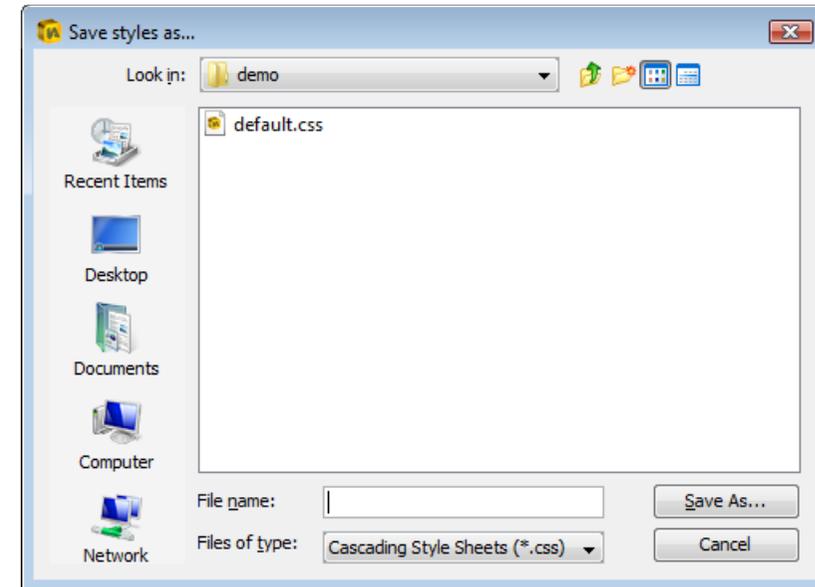
Click 'Save' to save changes to the open style sheet. Alternatively hold down 'Ctrl' and press 'S' on your keyboard. When restarted, the dynamic report will reflect any changes that you have made to the style sheet.

### Save As

Click 'Save As' if you wish to save your changes to a new style sheet. Alternatively hold down 'Ctrl' and 'Shift' and press 'S' on your keyboard. The 'Save styles as...' dialog will open (Figure 99). Browse to the folder in

which you wish to save your new style sheet, type a name in the 'File name' box and click 'Save'.

Figure 99



This option is useful if you wish to save different style sheets for a report. Simply save the different style sheets to the report's folder with names such as 'default1.css', 'default2.css', 'default3.css', etc. Once you have saved these files, you simply choose which one is active by renaming it 'default.css'. This is because by default an InstantAtlas report looks for a style sheet in its folder called 'default.css' and will ignore any others.

### Apply

This option is only available if you opened the Style Editor from the Publisher (via the Designer). Click 'Apply' when you have made all of your



style changes. The changes will be applied to the style sheet of the report you are publishing and the Style Editor will close.

### Exit

Click 'Exit' to close the Style Editor. If you have not saved your changes, you will be prompted to do so.

#### D.3.1.2. Edit

### Undo

Click 'Undo' to undo changes that you make to the style sheet. Alternatively hold down 'Ctrl' and press 'Z' on your keyboard. Most changes can be undone in this way. You can click 'Undo' multiple times in a row to undo a series of changes. This option will be greyed out if there are no changes to undo.

### Redo

Click 'Redo' to reapply any changes that you have undone by clicking 'Undo'. Alternatively hold down 'Ctrl' and press 'Y' on your keyboard. You can click 'Redo' multiple times in a row to reapply a series of changes. This option will be greyed out if there are no changes to reapply.

#### D.3.1.3. Help

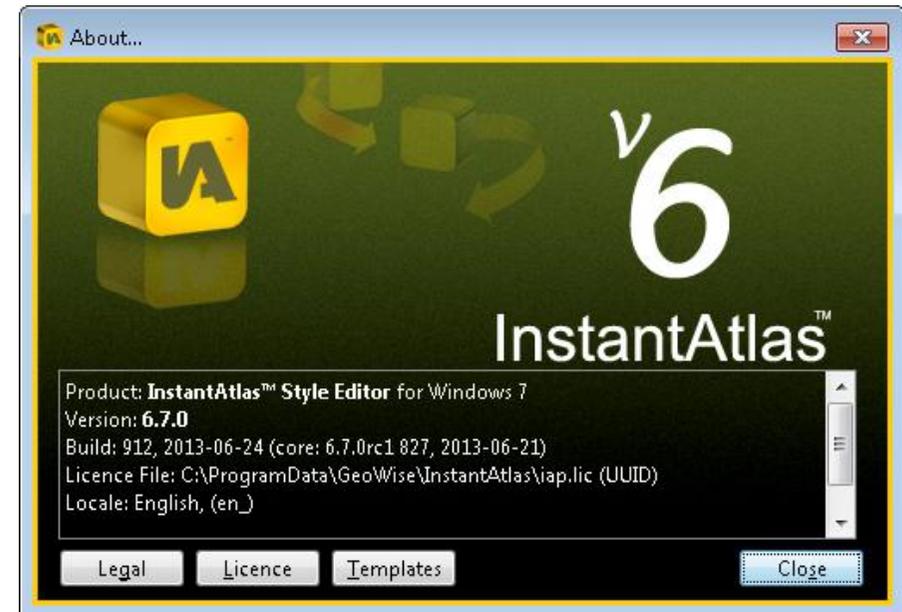
### Help on the Style Editor

Click 'Help on the Style Editor' to access the help pages for the Style Editor.

### About

Click 'About' to open the InstantAtlas 'About' window. It contains information regarding your Style Editor application, including the version number and the location of your licence file (Figure 100).

Figure 100



There are also three buttons linking to additional information. The 'Legal' button links to the InstantAtlas End-User Licence Agreement. The 'Licence' button links to 'Licence File Information', from which you can also upload a new licence file. The 'Templates' button links to an overview of available templates and also allows new templates to be uploaded.

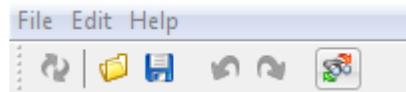


### D.3.1.4. Find and Replace

#### Global Property Change tool

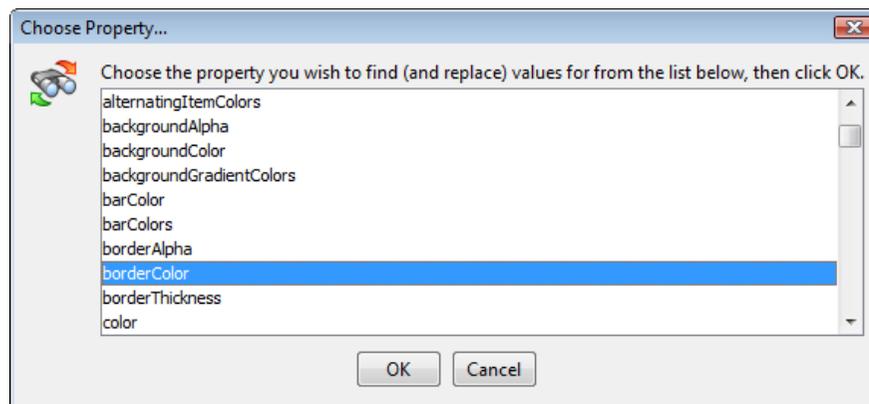
Click 'Find and Replace unique values within this style sheet' tool to access the property find and replace dialog. This button is found on the right end of the main toolbar found at the top of the Style Editor (Figure 101).

Figure 101



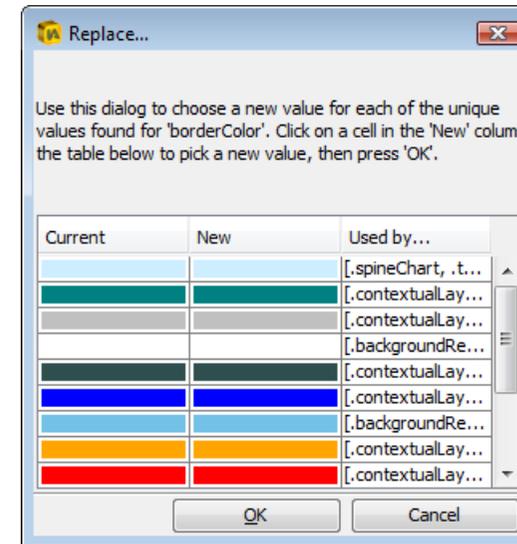
Within the 'Choose Property...' dialog, select the property which you would like to globally replace and click OK (Figure 102).

Figure 102



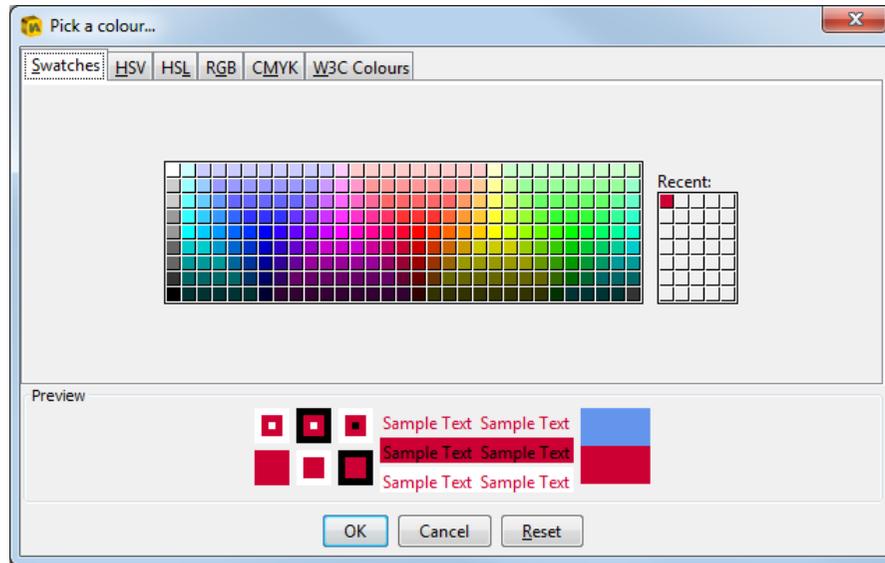
If for example 'borderColor' is chosen, this will produce the dialog in Figure 103. Click the colour box within the 'New' column. This will open a dialog where you can change the border colour globally throughout the style sheet.

Figure 103



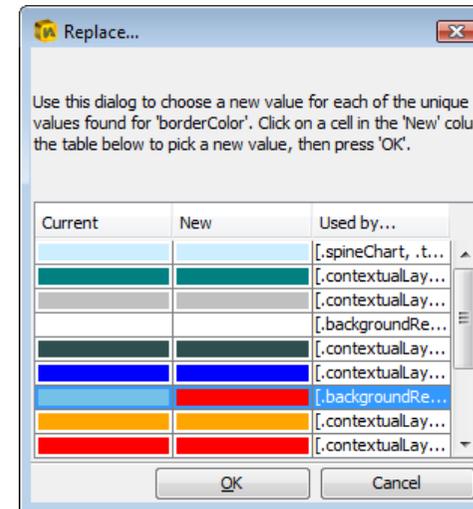
For example if the current light blue border colour property was to be changed to red, click the 'New' light blue box which will open the 'Pick a colour...' dialog. You can use any of the available tabs (Swatches, HSV, HSL, RGB, CMYK or W3C Colours) to pick a colour. Recent colours used will be displayed on the right (Figure 104).

Figure 104



Click 'OK' in the 'Replace...' dialog and the new colour (e.g. red) will be applied to all border colour properties which had the original colour (e.g. light blue) (Figure 105).

Figure 105

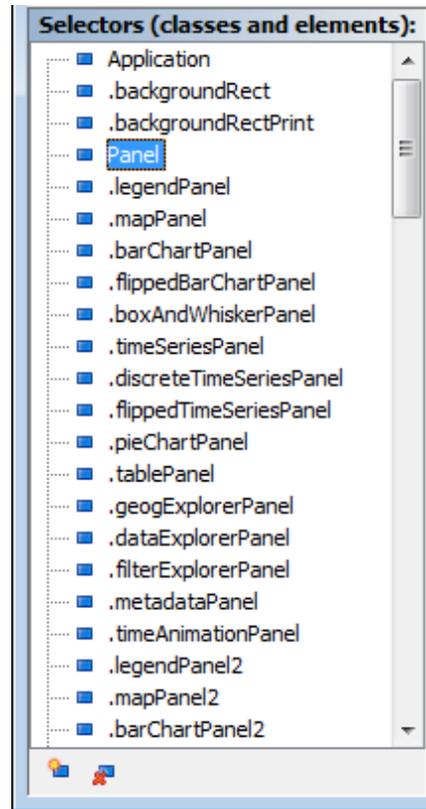


### D.3.2. The 'Classes' Pane

The 'Classes' pane lists the style classes and elements available in the open style sheet (Figure 106). Click on a class to select it.



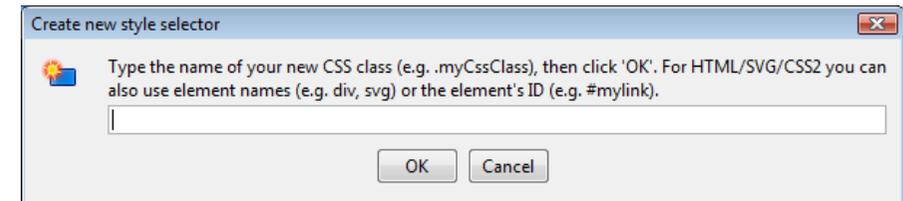
Figure 106



A description for each style class is displayed at the top of the 'Properties' pane. Also, you can tell from the names of the classes that many of them are related (Figure 106). The panel classes for example are controlled by the "parent" 'Panel' class within which individual properties can be changed. These changes made to the "parent" class will affect all panel objects in the dynamic report. You can override the global parent class by making changes to the "child" classes in order to style individual panel objects (e.g. '.mapPanel' for the map component only).

You can drag the right hand border of the pane if you wish to make the 'Classes' pane wider. There are two icons at the bottom of the 'Classes' pane. The icon on the left allows you to add a new class or element. If you click it, the 'Create a new style selector' dialog will appear (Figure 107).

Figure 107



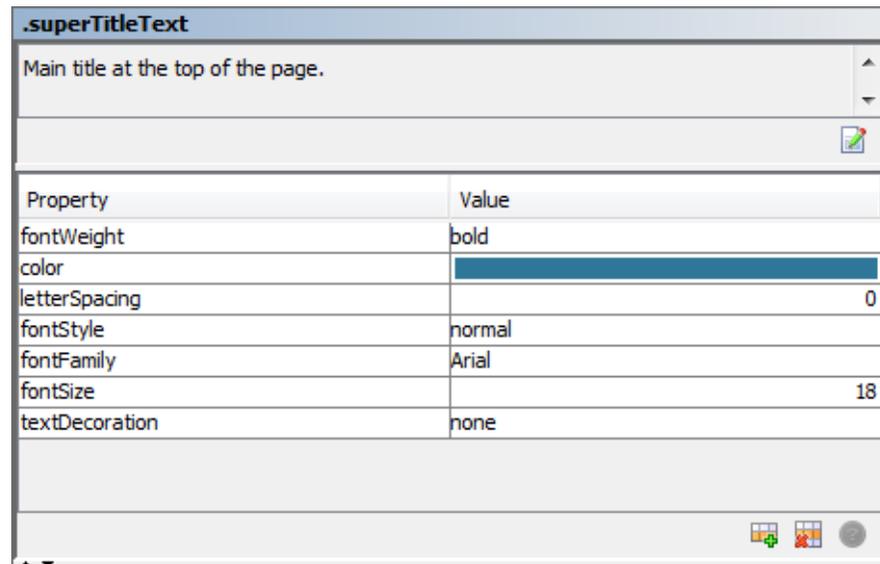
For example, you may have inserted a number of custom text components into your report using the Designer and wish them to be styled the same way. If there is not an existing style that is suitable, you could use the Style Editor to add a new class and create properties for it such as 'font-family', 'font-size' and 'fill'. You would then ensure your custom text components use the new class by editing the properties for the text component in the Designer ('Styles' tab, de-select the custom style and choose your new class from the drop down list).

The icon on the right allows you to remove the selected class or element. You can also access these options by right clicking on a style class in the list. You should not delete any of the default classes unless you are absolutely sure they will not be required otherwise you risk breaking your report.

### D.3.3. The 'Properties' Pane

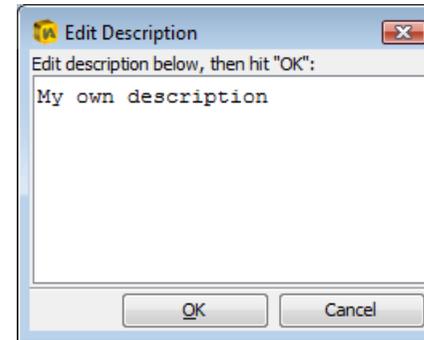
The 'Properties' pane displays the properties for the style class highlighted in the 'Classes' pane, the name of which is displayed at the very top of the pane (Figure 108).

Figure 108



Just below the name of the selected class you can see a description for that class. Below the description is a button that enables you to edit the description. Click the button to open the 'Edit Description' dialog (Figure 109).

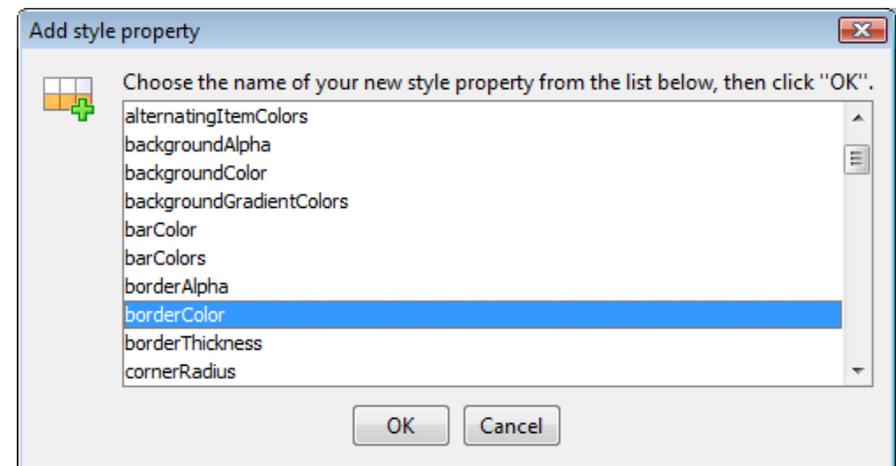
Figure 109



Type your new description and click the 'OK' button complete the change.

Properties and their values are listed below. You edit an existing value simply by clicking the cell containing the value. There are three icons in the bottom right corner of the 'Properties' pane. The leftmost icon is used to add a new property. Click it to open the 'Add style property' dialog (Figure 110).

Figure 110

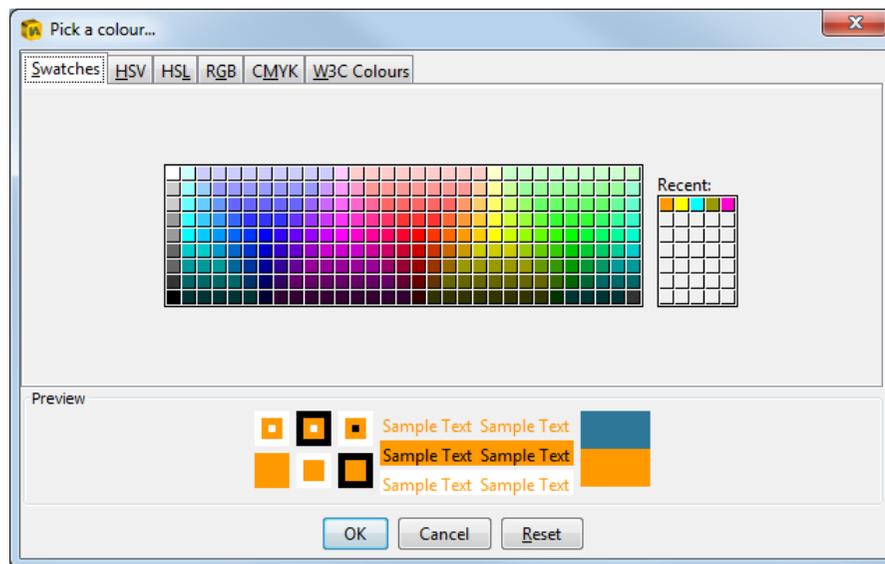


Click a property and click 'OK'.

The middle icon is used to delete the selected property. The rightmost icon is used to link to the description of this property in the W3C Recommendation for Scalable Vector Graphics (<http://www.w3.org/TR/SVG/>).

If you click a colour property the 'Pick a colour...' dialog will open. You can use any of the available tabs (Swatches, HSV, HSL, RGB, CMYK or W3C Colours) to pick a colour. Recent colours used will be displayed on the right (Figure 111).

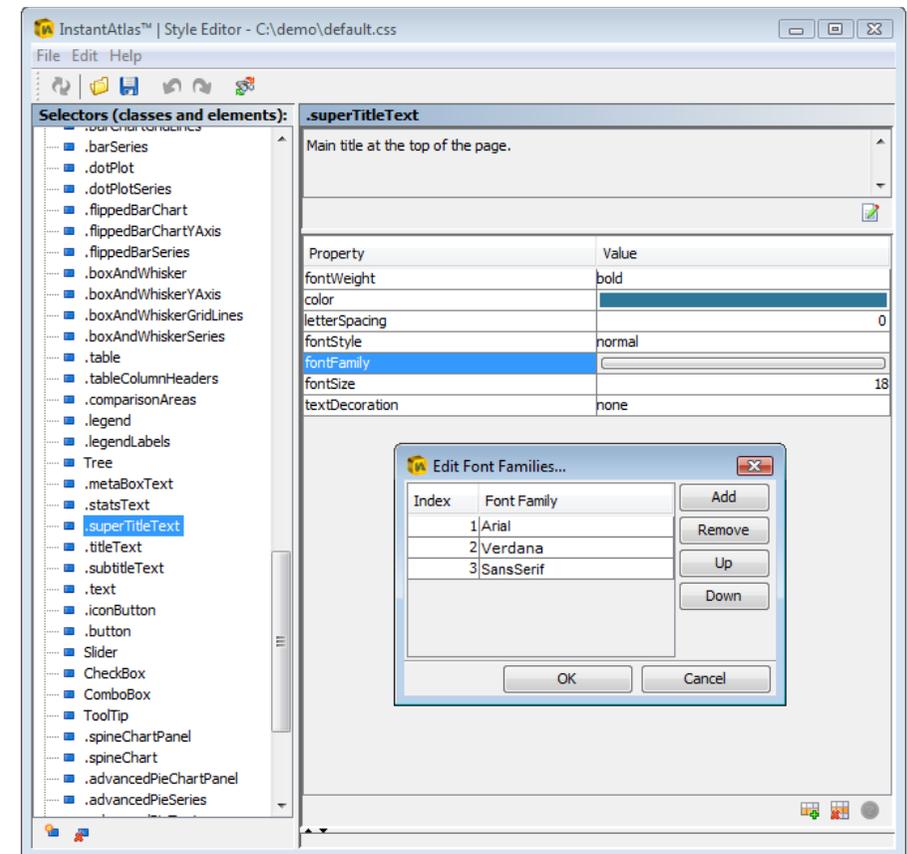
Figure 111



To change the font for text, simply click in the box containing the value for font-family. This will open the 'Edit Font Families...' dialog. Choose a Font Family then click OK. If you wish to use a font family that is not available

by default you can add another font family using the add button or you can change a currently available font family by double clicking the font family name and selecting the font of your choice (Figure 112).

Figure 112



The order of these fonts can be changed by selecting one and clicking the up or down buttons. The order is the order in which the end-user will be able to view the fonts. For example, if the end-user is viewing a dynamic



report and they do not have Arial or Verdana available on their computer then the text will show in the font Sans Serif (Figure 112).

When changing the value for font-size you can use the up/down arrows that appear or you can type in a new number and press the 'Enter' button on your keyboard.

## D.4. Applying a Style to Other Dynamic Reports

It is simple to apply a custom style to a series of InstantAtlas reports that you have published, even if the map and indicator data in each report is different. All you need to do is replace the existing default.css file of the dynamic report you want to change with the default.css file you have customised using the Style Editor.

 The style sheet is not specific to an individual template in the way that the configuration file (config.xml) is. However, it is specific to the template version and edition (Flash or HTML). For example, you can apply the same default.css file to Flash dynamic reports published using the Single Map, Double Map, Double Map Time Series and Area Profile v6.6.0 templates as long as they are all Flash reports. Applying a default.css file from a Single Map (HTML Edition) report would break any of these reports.



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## E.1. About this Section

The Excel Data Manager is an Excel add-in (i.e. a supplemental program that adds custom commands to Excel). It enables data in an Excel workbook to be exported as InstantAtlas XML or JSON data files.

For InstantAtlas Flash dynamic reports, the data files need to be in XML format. XML stands for Extensible Markup Language and is a flexible format for storing, structuring and publishing information.

For InstantAtlas HTML dynamic reports the data files need to be in JSON format. JSON stands for JavaScript Object Notation which is a text-based format for representing data structures.

## E.2. The Excel Add-in

With InstantAtlas version 5 or later, the Excel Data Manager add-in is automatically installed. However, you will still need to enable it in order for the InstantAtlas menu and toolbar to appear. If you have followed the instructions in the InstantAtlas Getting Started guide, you will already have enabled the add-in.

To enable the add-in follow the instructions below for either Excel 2007 / 2010 / 2013 or for earlier versions.

### Excel 2007 / 2010 / 2013

Open Excel. In Excel 2007 click the Office button and click on the 'Excel Options' button (Figure 113). For Excel 2010 and 2013 click the green

'File' tab and select 'Options' in the left hand menu (Figure 114 for Excel 2010; Figure 115 for Excel 2013).

Figure 113

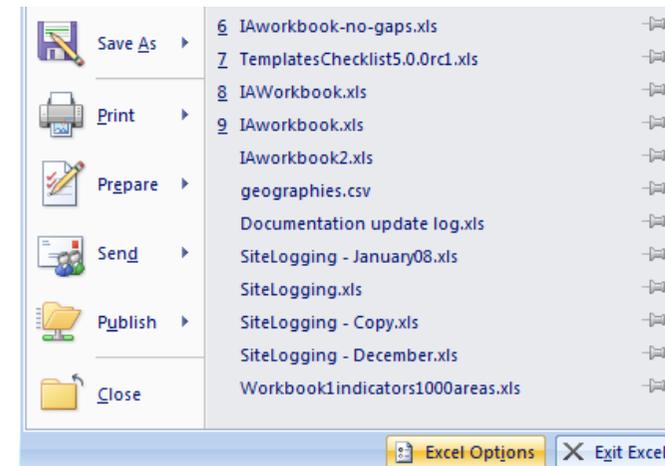


Figure 114

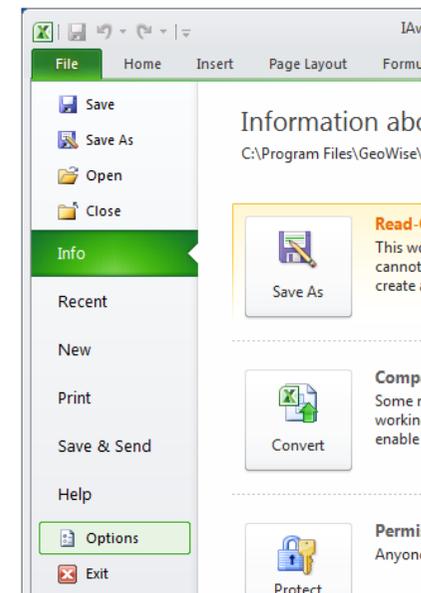
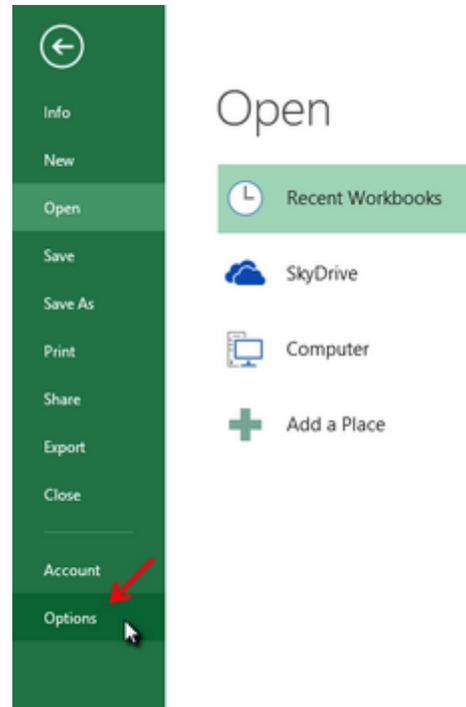


Figure 115



This should launch the Excel Options Window. In the left hand pane, choose Add-ins which will bring up the list of installed add-ins and whether they are active (enabled) or not.

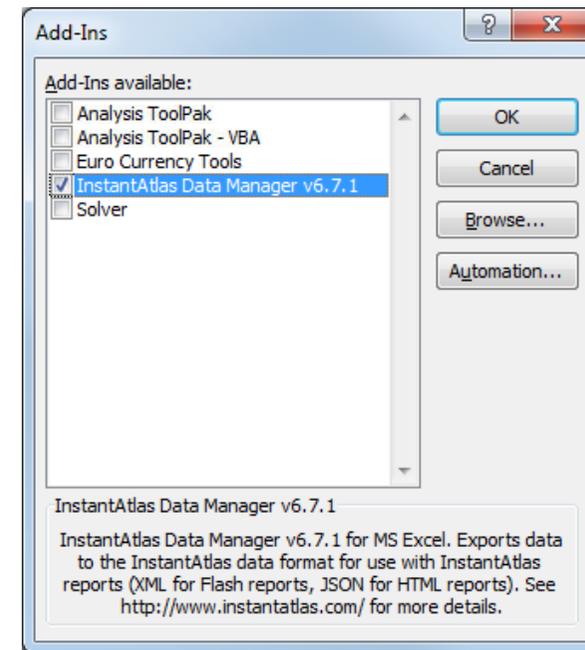
Initially the IA Data Manager may be in the list but it will not be active. To activate it, click the 'Go' button at the bottom of the add-in screen in order to start managing your add-ins.

If the IA Data Manager is not present in the Add-Ins dialog, click 'Browse...' and browse to the file called 'IA Data Manager.xla' which is located in the root folder of the InstantAtlas Desktop installation, usually 'C:\Program

Files\GeoWise\InstantAtlas', and click OK. It will now be available in the list of Add-Ins.

Select the InstantAtlas Data Manager from the checklist (Figure 116) and click 'OK'.

Figure 116



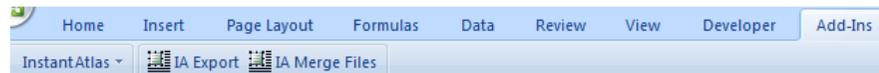
If you have multiple versions of the add-in available because you have upgraded from a previous version of InstantAtlas, please ensure that the most recent version has been enabled.

If you use Excel 2013 you will now need to close and then reopen Excel.



The add-ins tab should now display two new buttons (Figure 117). There is also a menu item called Instant Atlas from which these functions can also be selected.

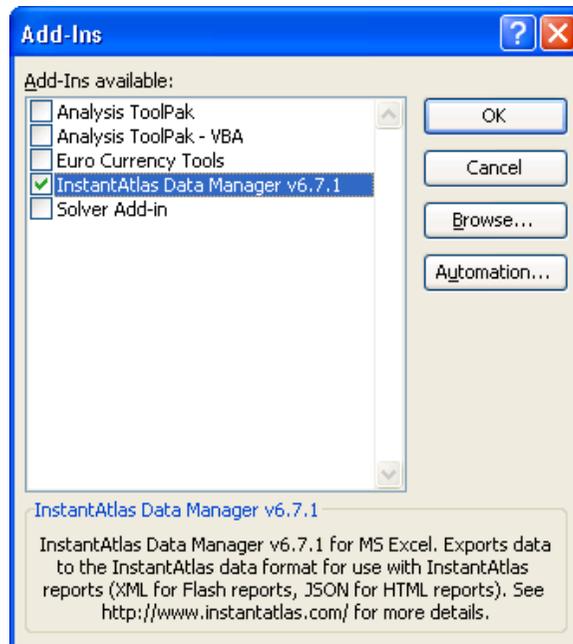
Figure 117



### Older versions of Excel

Open Excel. If no blank workbook automatically opens then open a new workbook. Click 'Tools', 'Add-Ins' and the 'Add-Ins' dialog will open (Figure 118).

Figure 118



Select the InstantAtlas Data Manager from the list so that the checkbox becomes checked. Click 'OK'. The dialog will close and you will see that Excel has a new menu called 'InstantAtlas' (Figure 119) and a new toolbar with two buttons (Figure 120).

Figure 119

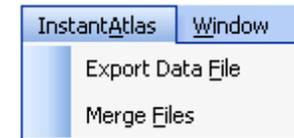


Figure 120



The add-in should be automatically installed. If however you cannot find the add-in in the list click the 'Browse' button and browse to the add-in provided with your InstantAtlas software. This is an XLA file called 'IA Data Manager {version number}.xla' located in the 'InstantAtlas' folder created during installation of your InstantAtlas software. Click 'OK'. The InstantAtlas Data Manager will appear among your list of add-ins. If you are prompted to copy the add-in file to your 'Add-Ins' folder we recommend that you say 'Yes'.

You can click and drag the toolbar to a dock in a new location above the worksheet. Alternatively you can drag it over the worksheet to display it as a floating toolbar. The menu and toolbar will be visible each time you start Excel.

This section of the user guide documents the 'IA Export' button. The 'IA Merge Files' button is used to create data files for multiple geography



reports. Section 'H. Multiple Geography Reports' of this user guide gives detailed information on how to create multiple geography reports.

Prior to InstantAtlas version 6.6.0, the Excel add-in also included a button 'IA Metadata' which was used to create metadata HTML pages. This functionality is now available as a separate add-in called 'InstantAtlas Metadata Manager'. If you are an InstantAtlas client you can download this add-in together with a guide explaining how to create metadata HTML pages from 'My InstantAtlas'.

Note that in earlier versions of InstantAtlas (version 3 or earlier) Excel Data Manager workbooks each had embedded macros that would create a toolbar with a single 'Export' button. If you are using old Excel workbooks to generate XML data files for version 4 or later reports, you should disable their macros when you open them in Excel. For this your macro security in Excel must be set to Medium. If you need to change your macro security in Excel, click 'Tools', 'Macros', 'Security'. You should no longer be using macros embedded in a workbook to generate XML data files for reports.

If you want to deactivate the add-in you should do the following:

#### Microsoft Office Excel 2007 / 2010 / 2013

1. In Excel 2007 click the Office button and click on the 'Excel Options' button. For Excel 2010 and 2013 click the green 'File' tab and select 'Options' in the left hand menu.
2. Select 'Add-ins' from the left hand side menu.
3. Click Go at the bottom of this pane, to Manage Excel Add-ins
4. The add-ins dialog will open, click the checkbox for the Excel Data Manager so that it is unselected

5. Click 'OK' to close the dialog. You will see that the 'InstantAtlas' menu and toolbar have disappeared.

#### Older versions of Excel

1. Click 'Tools', 'Add-Ins'
2. In the 'Add-Ins' dialog, click the checkbox for the Excel Data Manager so that it is unselected
3. Click 'OK' to close the dialog. You will see that the 'InstantAtlas' menu and toolbar have disappeared.

### E.3. The Excel Workbook

You enter your data into an Excel workbook. This will contain several worksheets and these must be populated according to a few basic rules. The sections below describe the role of each worksheet and how it should be populated.

As you read these sections, you should refer to the main example Excel workbook supplied with your InstantAtlas software. This is a file called 'IAworkbook.xls' located in the 'workbooks' folder created during the installation of your InstantAtlas software. By default the path to this file is C:\Program Files\GeoWise\InstantAtlas\workbooks. Alternatively it can be found from your Start Menu by browsing to 'InstantAtlas Desktop Edition', 'InstantAtlas Excel Data Manager'.

Once you have understood the rules for entering data, you can replace the example data with your own and use the workbook to generate XML data files for your own InstantAtlas report(s). You can make multiple copies of



this workbook simply by copying and pasting it or by opening it and saving with a different name.

## E.4. The Geography and Filters Worksheet

This worksheet lists the geographic features you have data for and any links and filters you care to define. All of the geographic features in the base geography of your report must appear in this worksheet. Remember that the base geography is the set of geographic features that you wish to produce a thematic map for. For example, if you have crime statistics for community districts in New York and you wish to make a thematic map of these, the base geography for your report will be New York community districts.

For each base geography feature you can optionally supply filter information. In InstantAtlas reports, a filter menu allows you to apply filters to the data displayed.

You have the option to include comparison geographies in this worksheet. Comparison geographies are displayed in a separate table in an InstantAtlas report. For example, if your base geography is New York community districts, your comparison geographies might be New York City and the USA. This would enable you to compare data for individual community districts to the city and national averages.

For each geographic feature you enter the following:

1. A unique code (column A)
2. A name (column B)
3. A link to an external file (column C) - optional

4. Filter information (columns D onwards) - optional

The 'Geography and Filters' worksheet is permanently active. It should not be renamed.

### E.4.1. Entering Codes (Column A)

The type of the digital map file used as the base geography for a report is defined in cell A1. Digital map files can be one of the following geometry types: polygon, line or point.

For example, if you publish a report with the boundaries of New York community districts (i.e. polygons) as your base geography, cell A1 should contain 'polygon'. If you publish a report with the Canadian rail network (i.e. lines) as the base geography, cell A1 should contain 'line'. If you publish a report with Scottish cities (i.e. points) as your base geography, cell A1 should contain 'point'.

From row 3 down, column A should contain codes for the geographic features in a report. It is essential that you populate column A with the correct codes. These must be exactly the same codes used to identify features in the digital map files published in your report. If you type in arbitrary codes that do not exist in your digital map files, your dynamic report will not be able to match data values to geographic features.

Because the codes in your Excel workbook must be the same as those in your map files, the same rules apply:

1. Codes must be unique (i.e. no code is repeated)
2. Codes must not include spaces
3. Every geographic feature must have a code



If you do not know what codes are used to identify features in your map files you can do the following:

1. Start the InstantAtlas Publisher
2. Publish a report with the desired base geography and contextual geographies
3. Click the 'Unpack' button on the final screen of the Publisher
4. Browse to the output folder for the report you published and open the file called 'geographies.csv' using Excel
5. The codes in your map file will be listed in the first column of 'geographies.csv'.
6. Copy and paste the codes from 'geographies.csv' into your 'Geographies and Filters' worksheet

Note that in InstantAtlas version 5 and earlier, feature codes were automatically given underscore prefixes by the Publisher and Data Managers if they started with a number. From InstantAtlas version 6 this rule has been dropped and feature codes will be preserved exactly as they appear in your digital map files or as entered into the Data Managers. Make sure that Excel does not automatically remove leading zeros from your codes – you can avoid this by typing a single quote before the code (this forces Excel to treat the code as text even if it consists of numbers).

If you wish to include comparison geographies you must enter their codes below those of the base geography features. The codes must be given the prefix # (e.g. #TA1 or #00AB) to distinguish them from base geography features. In the example provided, there are two comparison geographies: the City of Edinburgh and Scotland.

Please note that the number and order of areas in the Geography and Filters worksheet must be consistent with the number and order of those in your iadatasheet(s).

### E.4.2. Entering Names (Column B)

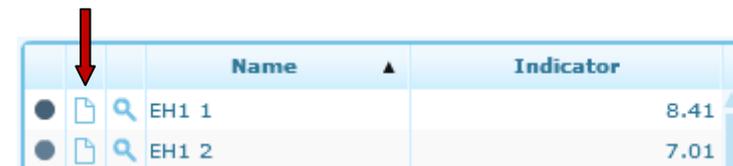
Check that cell B2 contains the name of your base geography. You can type any text here apart from a forward or back slash (/ or \). For example, if you publish a report for post code sectors, you could enter 'post code sectors' in cell B2. This text is used in the naming of the XML data files and will not be displayed in the report itself.

From row 3 down, column B should contain names for the geographic features. These are the feature names that will be displayed in the report. In the example provided, the names are similar to the codes but include spaces.

### E.4.3. Entering Links (Column C)

For each base geography feature, you can optionally specify a link to any file. This is the file that will open if the notes icon next to a geographic feature is clicked in the data table of an InstantAtlas report (Figure 121). Typically these are used to link to files containing geography-related metadata.

Figure 121

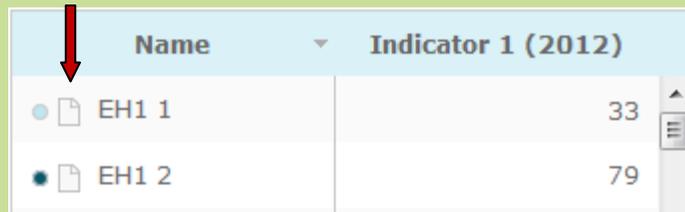


	Name ▲	Indicator
● [notes icon]	EH1 1	8.41
● [notes icon]	EH1 2	7.01



In InstantAtlas HTML dynamic reports the notes icon appears in front of the feature names in the same column (Figure 122). If your data does not contain a link in column 3 of the Geography and Filters worksheet for a certain geographic feature, no notes icon will appear in front of the name of this feature.

Figure 122



Name	Indicator 1 (2012)
EH1 1	33
EH1 2	79

So you can provide a link to geography metadata on a feature by feature basis.

In the example workbook, the link 'notes.htm' is provided for each feature. This means that when the notes icon is clicked for any feature, a file called 'notes.htm' located in the report folder will open. You can use absolute pathnames (e.g. 'C:\notes.htm') or relative pathnames (e.g. '../notes.htm'). If you intend to move your report folder it is best to put all external files you wish to link to into the report folder and specify relative pathnames to them in column C.

With relative pathnames, './notes.htm' means that 'notes.htm' is located in the report folder whereas '../notes.htm' means that 'notes.htm' is located in the parent folder. And '../../notes.htm' means that 'notes.htm' is located two levels above the report folder.

The following image (Figure 123) illustrates some examples of links that could be entered using absolute and relative pathnames.

Figure 123

	A	B	C
1	<b>polygon</b>		
2		<b>Post Code Sectors</b>	<b>Link</b>
3	EH11	EH1 1	<a href="#">eh11.htm</a>
4	EH12	EH1 2	<a href="#">eh12.htm</a>
5	EH13	EH1 3	<a href="#">C:\docs\eh13.htm</a>
6	EH104	EH10 4	<a href="#">./subfolder/eh104.htm</a>
7	EH105	EH10 5	<a href="#">../eh105.pdf</a>
8	EH106	EH10 6	<a href="http://www.instantatlas.com">http://www.instantatlas.com</a>
9	EH107	EH10 7	<a href="#">notes.htm</a>
10	EH141	EH14 1	<a href="#">geography.htm</a>
11	EH142	EH14 2	<a href="#">notes.htm</a>
12	EH143	EH14 3	<a href="#">notes.htm</a>

#### E.4.4. Entering Filter Information (Columns D Onwards)

By making entries in columns D onwards, you are able to define filters for your report. Row 1 should contain 'filter'. The entry in row 2 should be the name of the filter. Any text you enter in a filter column becomes a value within that filter. When you click a filter value under the Filter menu of your report, only geographic features with that filter value will be displayed.

In the example provided, there is one filter called 'Zones' (Figure 124). It has five values: Edinburgh Centre, North, South, East and West. This would give you a filter in the report looking like that shown in the following image. Clicking 'Edinburgh West', for example, would result in only post code sectors in Edinburgh West being displayed in the report.



Figure 124



You can have multiple filters in a report (Figure 125). For example you might add a second filter designed to group post code sectors with the same political affiliation.

Figure 125

D	E
filter	filter
Zones	Political Party
Edinburgh Centre	Party 1
Edinburgh Centre	Party 1
Edinburgh Centre	Party 1
Edinburgh South	Party 1
Edinburgh South	Party 1
Edinburgh South	Party 2
Edinburgh South	Party 2
Edinburgh West	Party 2
Edinburgh West	Party 2
Edinburgh West	Party 3
Edinburgh West	Party 3

This would give you a filter menu in the report with two filters (Figure 126).

Figure 126



You can add as many filters as you wish. Filters can be geographic or non-geographic.

## E.5. The Datasheets

In addition to the 'Geography and Filters' worksheet, you must have at least one datasheet in your workbook. Datasheets are where you enter the actual data values that will ultimately be displayed in your report. A worksheet becomes an active datasheet when its name starts with 'iadatasheet'. To rename a worksheet in Excel, you simply right click on the worksheet name and select 'Rename'. You can put all of your data values in one datasheet or spread them between two or more datasheets.

Your workbook can contain one or more active datasheets. Note that worksheet names must be unique in Excel. So if your workbook contains more than one active datasheet you could, for example, name them iadatasheet1, iadatasheet2, iadatasheet3 and so on. The number of active



datasheets will affect the number of data files produced when the data is exported - this will be explained in more detail in section 'E.7. Exporting Data Files'.

### E.5.1. Entering Indicators

Please refer to the 'Example 1 iadatasheet' of the example workbook.

#### E.5.1.1. Entering Codes (Column A)

The contents of this column must be exactly the same as that of column A in the 'Geography and Filters' worksheet.

#### E.5.1.2. Entering Names (Column B)

The contents of this column must be exactly the same as that of column B in the 'Geography and Filters' worksheet.

#### E.5.1.3. Entering Indicator Values (Columns C Onwards)

Columns C onwards hold the data values that will be displayed in your report. The data you enter must be organised on three levels: by theme, by indicator and by time period (Figure 127).

Figure 127

	A	B	Theme 1				Theme 2			
			Indicator 1		Indicator 2		Indicator 3		Indicator 4	
			notes.htm	notes.htm	notes.htm	notes.htm	notes.htm	notes.htm	notes.htm	notes.htm
			numeric	numeric	numeric	numeric	numeric	numeric	categoric	categoric
	Codes	Names	2004	2005	2004	2005	January	February	January	February
6	EH11	EH1 1	25.10	8.41	69.18	67.72	500	400	High	High
7	EH12	EH1 2	16.22	7.01	63.98	62.89	505	405	High	High
8	EH13	EH1 3	19.36	7.12	44.99	37.46	510	410	High	High
9	EH104	EH10 4	9.66	3.68	34.75	32.74	515	415	High	High
10	EH105	EH10 5	5.18	3.58	21.58	17.99	520	420	Intermediate	High
11	EH106	EH10 6	3.23	2.18	7.42	6.71	525	425	Intermediate	High
12	EH107	EH10 7	3.36	1.73	2.94	2.97	530	430	Intermediate	High
13	EH141	EH14 1	8.86	4.94	46.74	40.93	535	435	Low	High
14	EH142	EH14 2	11.23	6.16	61.20	55.98	540	440	Low	High
15	EH143	EH14 3	17.78	8.80	62.75	50.29	545	445	Low	High
16	EH144	EH14 4	11.15	10.19	50.99	42.31	550	450	Intermediate	High
17	EH145	EH14 5	0.00	3.92	9.09	2.55	555	455	Intermediate	High
18	EH146	EH14 6	2.95	2.21	9.15	7.95	590	490	High	Intermediate

#### Rows 1 and 2

Row 1 contains the theme names, row 2 the indicator names. These names can be anything you like. Be careful not to include leading or trailing spaces as these may result in errors in an InstantAtlas report.

You can see that the cells in rows 1 and 2 are merged so that they span more than one column. This is because the cell containing a theme name must span all the columns belonging to that theme. Similarly, the cell containing an indicator name must span all the columns belonging to that indicator. It is very important that cells containing theme and indicator names span the correct number of columns or the data files you generate will be invalid.

There are two time periods with data for Indicator 1: 2004 and 2005. Thus the cell containing the indicator name must span two columns. There are two indicators in Theme 1, each with two columns containing data. Thus the cell containing the theme name must span four columns.



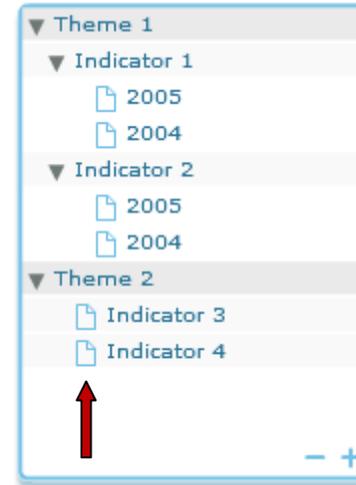
In an Excel worksheet, one cell can be made to span a number of columns by merging. You can merge cells in a spreadsheet by doing the following:

1. Select the cells you want to merge by clicking and dragging so that they are highlighted
2. Right-click your selection
3. Choose Format Cells... from the context menu.
4. Click the Alignment tab
5. Tick the box labelled Merge cells
6. Click OK

### Row 3

Row 3 is used to provide links to files of your choice. These are the files that will open when the notes icon for an indicator or time period (lowest hierarchy level) is clicked in the data explorer of a report (Figure 128). This is usually used to link to indicator-related metadata. You can specify a different link for each indicator or time period.

Figure 128



In the example workbook, 'notes.htm' has been entered for every indicator. This means that when the notes button is clicked, a file called 'notes.htm' located in the report folder will open. You can type in any links you like (Figure 129). The pathnames you enter can be absolute or relative. The following image shows examples of some alternative links that you might enter.

Figure 129

C	D	E	F	G	H
Theme 1				Theme 2	
Indicator 1		Indicator 2		Indicator 3	Indicator 4
C:\notes.htm	C:\info\notes.htm	../notes.htm	../info\notes.htm	<a href="http://www.instantatlas.com">http://www.instantatlas.com</a>	<a href="http://www.example.com">http://www.example.com</a>
numeric		numeric		numeric	categoric
2004	2005	2004	2005		
25.10	8.41	69.18	67.72	500	High
16.22	7.01	63.98	62.89	505	High
19.36	7.12	44.99	37.46	510	High
9.66	3.68	34.75	32.74	515	High
5.18	3.58	21.58	17.99	520	Intermediate
3.23	2.18	7.42	6.71	525	Intermediate



#### Row 4

Row 4 is used to specify the type of indicator. This can be 'numeric' or 'categoric'. You only need to specify the indicator type in the first column for each indicator.

Indicator Type	numeric	categoric
Use when...	...the data values for your indicator are numerical.	...the data values for your indicator are textual rather than numerical.
Sorting in Data Table	numerical	alphabetical
Alignment in Data Table	right aligned	left aligned
Examples	The percentage of population in the 15-18 age group or average household income	Political affiliation (Republican, Democrat, etc) or land classification (Urban, Rural, etc)

For the InstantAtlas version 6 reports it is possible to specify a precision value in the metadata for numeric indicators. For 'categoric' indicator types, this precision value is ignored.

#### Row 5

Row 5 contains the time period names. These names can be anything you like. Time periods for an indicator should be entered in columns from left to right in ascending chronological order. If you only have a single time period for each indicator, you should leave the cells in row 5 blank. You will then just see two levels (Theme >> Indicator) instead of three (Theme >> Indicator >> Time Period) in the data explorer of your report.

#### Data values

Starting in cell C6 you should enter your data values. As indicated above, you should generally enter numbers for 'numeric' type indicators and text values for 'categoric' type indicators. However, it is possible to enter text values for 'numeric' type indicators – this can be useful if, for example, you need to suppress a value due to a case of small numbers. In the following image (Figure 130) you can see that <5 has been entered as a data value for three geographic features. This is a text value and will be treated as such – these areas will be classified separately by the legend. Other text values used for 'numeric' type indicators might be '-' or 'N/A' for example.

Figure 130

	A	B	C	D
1				
2			Indicator 1	
3			C:\notes.htm	C:\notes.htm
4			numeric	
5	Codes	Names	2004	2005
6	EH11	EH1 1	25.10	8.41
7	EH12	EH1 2	<5	<5
8	EH13	EH1 3	19.36	7.12
9	EH104	EH10 4	9.66	3.68
10	EH105	EH10 5	5.18	3.58
11	EH106	EH10 6	<5	<5
12	EH107	EH10 7	<5	<5
13	EH141	EH14 1	8.86	4.94
14	EH142	EH14 2	11.23	6.16
15	EH143	EH14 3	17.78	8.80
16	EH144	EH14 4	11.15	10.19
17	EH145	EH14 5	0.00	3.92

You do not have to enter a data value for every geographic feature – if you leave a cell blank then "No Data" (or some other text you set in the



configuration file of the report using the InstantAtlas Designer) will be displayed in the report for this area. In the example workbook, data values have not been entered for three features in the base geography.

The Data Manager must not contain any Excel error codes such as '#DIV/0!'. These error codes may be present if values in the worksheet are the result of a formula. The result of formulas can be used to generate data though it is considered safer to copy and paste these as 'values'.

Numbers should not have a comma as the thousand place separator (e.g. 12,000). If they do have a comma, you can change this by doing the following:

1. Select the range of cells containing the data values so that they are highlighted
2. Click the 'Format' menu, 'Cells', 'Number'
3. In the 'Format Number' dialog, ensure the 'Use 1000 Separator' checkbox is not checked. Click 'OK'.

InstantAtlas reports will by default display your data values with the decimal places setting for the cells in your workbook. To change the number of decimal places you can do the following:

1. Select the range of cells containing the data values so that they are highlighted
2. Click the 'Format' menu, 'Cells', 'Number'
3. In the 'Format Number' dialog, ensure the 'Category' is set to 'Number' and then edit the number of decimal places. Click 'OK'.

We recommend that you avoid data values with excessive precision (7.34167683947). There are two main considerations when you choose the number of decimal places for an indicator:

1. The number of decimal places necessary for interpretation by the end-user of the dynamic report (long numbers are more difficult to visualise/interpret)
2. The performance of the dynamic report (long numbers mean larger data files and potentially a reduction in the speed of the report)

You should round values with an excessive number of decimal places as described above.

#### **Adding further themes/indicators/time periods**

Simply add further data in the columns to the right of the existing data. Make sure you enter the names, links, indicator type and time period labels in rows 1-5 and that you merge cells in rows 1-2 as required. If you run out of columns (the limit in Excel 97-2003 is 255, from Excel 2007 onwards the limit is 16,384 columns), simply do the following:

1. Insert a new worksheet into your workbook
2. Copy columns A and B from the previous worksheet
3. Paste the contents into columns A and B of your new worksheet
4. Start adding data in columns C onwards
5. Rename the worksheet to a name starting with 'iadasheet' to make it an active datasheet



## E.5.2. Entering Associate Values

Please refer to the 'Example 2 iadatasheet' of the example workbook.

An associate is a set of values that are so called because they are associated to indicator values. Associate values are not used in thematic mapping in InstantAtlas reports but perform other roles. The inclusion of associate values is optional but the default configuration of some templates assumes that you will be supplying certain associates. The table below lists these associates.

Associate	Reason for including in your data file(s)
ll	Lower confidence limits are displayed as error bars in a report bar chart. You can calculate these confidence limits in any way you like.
ul	Upper confidence limits are displayed as error bars in a report bar chart. You can calculate these confidence limits in any way you like.
highField, lowField, openField, closeField	These associates need to be provided if you would like to use the box-and-whisker chart in your report. This chart can be included in the Single Map template using the Designer. Please see an example on how to set up the data for this chart in the 'Box and Whisker iadatasheet'.
diff, number, significance, national, regional, baseline, state, trend, target	These associates perform various roles in the Area Profile template. For more information please refer to section 'I. The InstantAtlas Area Profile Template'.
xValue, yValue, sizeValue, FUNNELX	These associates perform various roles in the Bubble Plot template. For more information please refer to section 'J. The InstantAtlas Bubble Plot Template'.

In addition to those listed in the table above you can supply your own associates. You will need to configure your dynamic report using the InstantAtlas Designer to make use of any custom associate(s) you have supplied. Typically this is done by adding an extra column to the data table and linking this new column to the custom associate (the column name must match the associate name). You can also use associates to populate the Advanced Pie Chart.

The 'Example 2 iadatasheet' worksheet demonstrates how to include associate values in your workbook. Associate values are entered in columns directly to the right of the indicator values to which they relate. Note that you do not have to supply the same set of associates for every date or indicator. You do not have to supply associate value columns for every indicator/time period combination in your datasheet – you might decide to enter these for some but not others.

You must merge cells in row 3 to tell InstantAtlas which columns belong to each time period instance of an indicator. Associates should be named in row 5 as in the table above (Figure 131). Associate names must be consistent across dates/indicators. Note that these are not the names displayed in an InstantAtlas report - the report will display an alias that you can configure using the InstantAtlas Designer. If you supply your own custom associates we recommend you keep the associate name simple (i.e. a single word that does not include any special characters).



Figure 131

	A	B	C	D	E	F	G	H
1			Indicator 1					
2			notes.htm					
3			numeric			count	catgoric	
4	Codes	Names	1991	ll	ul		state	20
6	EH11	EH1 1	25.10	22.96	27.23	1584	high	
7	EH12	EH1 2	16.22	14.41	18.02	1607	high	
8	EH13	EH1 3	19.36	17.15	21.57	1225	high	
9	EH104	EH10 4	9.66	9.03	10.29	8450	medium	
10	EH105	EH10 5	5.18	4.72	5.64	8922	low	
11	EH106	EH10 6	3.23	2.85	3.61	8419	low	
12	EH107	EH10 7	3.36	2.81	3.90	4143	low	
13	EH141	EH14 1	8.86	8.31	9.40	10478	medium	
14	EH142	EH14 2	11.23	10.49	11.98	6931	medium	
15	EH143	EH14 3	17.78	17.01	18.56	9402	high	
16	EH144	EH14 4	11.15	10.47	11.83	8138	medium	
17	EH145	EH14 5	0.00	0.00	0.00	184	low	

The 'count' and 'state' associates in the 'Example 2 iadatasheet' worksheet are examples of custom associates that can be added. When mapping rates it is good practice to show counts alongside them in the data table. You can add a 'Count' column to the data table of your report using the InstantAtlas Designer and configure it to pick up an associate in the data file called 'count' (see section 'C. The InstantAtlas Designer', sub-section 'C.4.3.5. Table Properties' for more information). The same applies to the 'state' associate respectively.

By default associate columns are assumed to be of type numeric. If you have associate columns with textual data you should change the type to be catgoric. You can do this either in the iadatasheet in the cell directly above the associate column name (row 4) or alternatively you can define the type in the 'Metadata' worksheet. Please refer to section 'E.6.2.2. Setting a Data Type for Associates' for further information.

## E.6. The Metadata Worksheet

Including metadata in your data XML files is optional (unless you are creating data file for InstantAtlas Server). However, there are two reasons why you might include metadata:

- Metatext – this metadata will be shown within the 'metatext' text box in your InstantAtlas dynamic reports. This is a useful way of displaying theme, indicator, or time period specific notes or tips on the report page itself.
- Indicator display metadata – this metadata will define how an indicator is displayed in your reports.

From version 6.4.0 onwards you can have multiple Metadata worksheets which might be helpful if you want to structure your metadata into logical groups. A metadata worksheet becomes active when its name starts with 'Metadata'.

### E.6.1. Adding Metatext

The format for entering metatext is shown below (Figure 132).

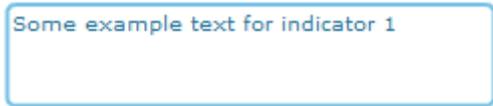
Figure 132

	A	B	C	D
1	ElementType	Element	MetadataElement	Value
34	Theme	Theme 2	metatext	Some example text for theme 2
35	Indicator	Indicator 1	metatext	Some example text for indicator 1
36	IndicatorDate	Indicator 2 2004	metatext	Some example text for indicator 2, date 2004



Column A must contain either 'Theme', 'Indicator' or 'IndicatorDate'. Column B should contain the name of the theme, indicator or date you want to display text for. Column C must contain 'metatext'. Column D should contain the text that you wish to appear in the report text box (or text boxes in the case of a report published using the Double Map template or Double Map Time Series template). The following image (Figure 133) shows how this metatext would look in a text box in a report. Note that the text box(es) are added to a report using the InstantAtlas Designer and that their size and position is configurable. Note also that HTML can be used to format metatext.

Figure 133



Some example text for indicator 1

If your indicator names are not unique, you can address this by adding the theme name in front of the indicator name in column B. Both must be separated by a pipe symbol, e.g. 'Theme 1|Male'.

For Flash dynamic reports it is possible to use a subset of html commands to format metatext. The following tags are supported:

Anchor tag (<a>)

Bold tag (<b>)

Break tag (<br>)

Font tag (<font>)

Image tag (<img>)

Italic tag (<i>)

List item tag (<li>)

Paragraph tag (<p>)

Text format tag (<textformat>)

Underline tag (<u>)

In an InstantAtlas HTML dynamic report you can use any HTML commands to style and format your metatext.

### E.6.2. Adding Indicator Display Metadata

It is possible to provide indicator display metadata that will allow define how an indicator is displayed. This will allow you to set the following:

1. Precision
2. Data type
3. Custom legends
4. Chart axis minimum and maximum
5. Data table column aliases
6. Additional data table columns

In InstantAtlas HTML dynamic reports, adding data table columns for an indicator overwrites all columns defined in the config.xml file. Defining table column aliases is only possible through completely re-defining the table columns.

Indicator display metadata are defined in the 'Metadata' worksheet and the process for entering these is the same as for other metadata elements. The example workbook contains some example indicator display metadata



in the 'Example Metadata' worksheet. To activate this worksheet you would need to rename it to 'Metadata'.

### E.6.2.1. Setting the Precision for Indicators and Associates

InstantAtlas version 6 reports support a precision value for each indicator and associate. An example can be seen below (Figure 134):

Figure 134

	A	B	C	D
1	ElementType	Element	MetadataElement	Value
36	Indicator	Indicator 1	precision	1
37	Indicator	Indicator 1 count	precision	2

Figure 134 shows how you can set a precision value for an indicator (row 2) or an associate (row 3). In the example above, the main indicator value will display with 1 decimal place, whereas the associate value 'count' will always be shown with two decimal places. Please note that precision is only used where the data type is numeric.

Precision settings can be defined on a theme, indicator and time period level. Figure 135 shows an example of how to set different precision values for an associate column called 'count' for two different time periods for the same indicator.

Figure 135

	A	B	C	D
1	ElementType	Element	MetadataElement	Value
50	IndicatorDate	Indicator 1 count 1991	precision	2
51	IndicatorDate	Indicator 1 count 2001	precision	3

If your indicator names are not unique, you can address this by adding the theme name in front of the indicator name in column B. Both must be separated by a pipe symbol, e.g. 'Theme 1|Male'.

The following tables show the syntax of possible settings. The settings are hierarchical: a Theme is overridden by an Indicator, and an Indicator is overridden by an IndicatorDate. A setting that is higher in the list will always overwrite a setting from lower down for the particular element. For example if you set a theme to have a precision of 2, and also specify an indicator of this theme to have precision of 0, then the latter will overwrite the former for this particular indicator. In the tables below a \* symbol is used as a wild-card and means any theme, indicator or associate column.



The wild-card option is only valid for the precision and type metadata elements.

#### For themes / indicators / dates:

ElementType	Element
IndicatorDate	Theme Name Indicator Name Date
IndicatorDate	Indicator Name Date
Indicator	Theme Name Indicator Name
Indicator	Indicator Name
Indicator	Theme Name *
Indicator	*
Theme	Theme Name
Theme	*



**For associates:**

ElementType	Element
IndicatorDate	Theme Name Indicator Name Associate Name Date
IndicatorDate	Indicator Name Associate Name Date
Indicator	Theme Name Indicator Name Associate Name
Indicator	Indicator Name Associate Name
Indicator	Theme Name Indicator Name *
Indicator	Indicator Name *
Indicator	Theme Name * Associate Name
Indicator	*  Associate Name
Theme	Theme Name Associate Name
Theme	* Associate Name
Theme	Theme Name
Theme	*

**E.6.2.2. Setting a Data Type for Associates**

The main indicator value data type is controlled in the iadatasheet and can be either numeric or categoric (see section 'E.5.1.3. Entering Indicator Values (Columns C Onwards)', sub-section 'Row 4'). Where a data type is not supplied for an associate, the type will default to numeric. Should you wish to change the default setting for each associate, you can do this either in the iadatasheet in the cell directly above the associate column (row 4) or alternatively you can supply metadata (Figure 136). The data type controls how a particular data value is presented (such as alignment) and how it is

sorted (numerically or categorically). The type for associates can be set on theme, indicator and time period level.

Figure 136

	A	B	C	D
1	ElementType	Element	MetadataElement	Value
2	Indicator	Indicator 1 state	type	categoric

If your indicator names are not unique, you can address this by adding the theme name in front of the indicator name in column B. Both must be separated by a pipe symbol, e.g. 'Theme 1|Male'.

For the data type of associates, the same syntax rules apply as for precision settings (please refer to the table 'For associates' in the previous section).

**E.6.2.3. Setting Custom Legends**

It is also possible to set custom classifications for individual themes, indicators or time periods. You can also set custom colours and labels for the display of the custom classification within a dynamic report. Furthermore you can define that a theme, indicator or time period appears with a specific legend classifier or legend palette by default.

Custom classifications are defined in the 'Metadata' worksheet in the Excel Data Manager. The following image (Figure 137) shows a screenshot of the 'Metadata' worksheet in an instance of the Excel Data Manager. A custom classification is set up for 'Indicator 1' which is a numeric indicator and for 'Indicator 4' which contains categoric values. The default legend classifier for 'Indicator 2' is set to Equal Interval and the default legend



palette for this indicator will be the one called 'Sequential Green Yellow' in the config.xml file (Figure 137).

Figure 137

	A	B	C	D
1	<b>ElementType</b>	<b>Element</b>	<b>MetadataElement</b>	<b>Value</b>
2	Indicator	Indicator 1	customColours	#8abb58,#5f557,#c43d3d
3	Indicator	Indicator 1	customBreaks	0;3;7;11;20;40
4	Indicator	Indicator 1	customLabels	very low;low;middle;high;very high
5	Indicator	Indicator 4	customColours	#a3d174,#fff195,#e395a7
6	Indicator	Indicator 4	customBreaks	Low;Intermediate;High
7	Indicator	Indicator 4	customLabels	Low (< 25%);Intermediate (25% - 60%);High (> 60%)
8	Indicator	Indicator 2	customClassifier	equalInterval
9	Indicator	Indicator 2	customPalette	Sequential Green Yellow

You can see from the screenshot that the custom classification for both indicators ('Indicator 1' which is of type numeric and 'Indicator 4' which is of type categoric) is made up of three separate custom properties: customColours; customBreaks and customLabels.

If your indicator names are not unique, you can address this by adding the theme name in front of the indicator name in column B. Both must be separated by a pipe symbol, e.g. 'Theme 1|Male'.

### customColours

Use this property to set the colours for displaying individual classes or to set a colour ramp. If the number of colours you define in column D matches the number of classes in the custom classification then the colours will be displayed for each class in the same order in which you enter them in the worksheet. You can set just two colours and the dynamic report will create a colour ramp between them for as many classes as you have chosen.

### customBreaks

Use this property to set the breaks between different classes. You should set one more value than the number of classes that you require i.e. if you want 5 classes you need to enter 6 values for breaks. If you have categoric data then you must use the exact text label used within the data. Categoric breaks are case sensitive.

### customLabels

Use this property to set the labels for each class that is displayed in the legend. The labels are applied in the order in which you enter them in the worksheet. You need to make sure that the number of labels matches the number of classes you have set up.

### customClassifier

Use this property to set the default legend classifier for an indicator to one of the InstantAtlas standard classifiers. Valid values are 'equalInterval', 'quantile', 'natural', 'continuous', 'standardDeviation'.

### customPalette

Use this property to set the default legend palette for an indicator to one of the legend palettes that are defined in the config.xml file. Valid values are the names of the palettes in the configuration file. To find these, open up the config.xml file or your report in the Designer and click in the menu bar on 'Styles' and the 'Palettes'. In the 'Palettes (numeric data)' tab you can find the palettes names for numeric indicators and the tab called 'Colour Schemes (textual data)' will show you the names of the categoric palettes.



#### E.6.2.4. Setting the Chart Axis Minimum and Maximum

By default the bar chart and time series chart adjust their minimum and maximum depending on the data the chart shows. This might not be suitable e.g. when using a time animation. To set the chart minimum and maximum to a fixed value for each theme or indicator you can use the metadata elements 'minChartValue' and 'maxChartValue' (Figure 138).

Figure 138

	A	B	C	D
1	<b>ElementType</b>	<b>Element</b>	<b>MetadataElement</b>	<b>Value</b>
47	Indicator	Indicator 1	minChartValue	0
48	Indicator	Indicator 1	maxChartValue	60



Please note that these two properties are depended on each other which means you can only use them together. Just setting the 'maxChartValue' without having the 'minChartValue' defined will not have any effect.

If your indicator names are not unique, you can address this by adding the theme name in front of the indicator name in column B. Both must be separated by a pipe symbol, e.g. 'Theme 1|Male'.

#### E.6.2.5. Setting Data Table Column Aliases

Defining table column aliases on a theme, indicator or time period basis in HTML reports is only possible through completely re-defining the table columns, see 'E.6.2.6. Defining Additional Data Table Columns'.

For each individual theme, indicator or time period, you can define the column aliases that will be displayed in the data table. By default, the report will display the global alias settings defined in the data table properties in the config.xml file. If you wish the column headers to be different for different themes/indicators/time periods, you can overwrite the global settings from the config.xml file. To do this, define the columns headings by using the metadata element 'alias\_indicator' for the indicator column heading and 'alias\_{associateName}' for associate column headings. Figure 139 shows an example for both cases.

Figure 139

	A	B	C	D
1	<b>ElementType</b>	<b>Element</b>	<b>MetadataElement</b>	<b>Value</b>
18	Indicator	Indicator 1	alias_indicator	My indicator
19	Indicator	Indicator 2	alias_count	Number

If your indicator names are not unique, you can address this by adding the theme name in front of the indicator name in column B. Both must be separated by a pipe symbol, e.g. 'Theme 1|Male'.

Please note that it is currently not possible to change the aliases of columns containing the confidence limits 'ul' and 'll'. Also this functionality is not supported for the Double Map Template

#### E.6.2.6. Defining Additional Data Table Columns

It is also possible to define on a theme, indicator or time period basis additional data table columns. You should define all columns which will be displayed for all themes, indicators and time periods globally in the data table properties in the config.xml file. Additional columns, which are specific for one or more of the themes/indicators/time periods, can then be



set up in the 'Metadata' worksheet. The appropriate metadata element is 'column\_indicator' for the indicator column and 'column\_{associateName}' for associate columns. In the 'Value' cells of column D you can define the aliases of the new data table columns. Examples can be seen in Figure 140.

Figure 140

	A	B	C	D
1	<b>ElementType</b>	<b>Element</b>	<b>MetadataElement</b>	<b>Value</b>
20	Indicator	Indicator 1	column_indicator	Additional indicator column
21	Indicator	Indicator 2	column_count	Additional count column

In InstantAtlas HTML dynamic reports, adding data table columns for a theme, indicator or time period overwrites all columns defined in the config.xml file. This means that you will also need to add the 'Name' column which holds the names of the geography features. The metadata element for this is 'column\_name'. The indicator column can be defined with either 'column\_indicator' or 'column\_value' as the metadata element. For associate columns use 'column\_{associateName}' e.g. 'column\_count'.

If your indicator names are not unique, you can address this by adding the theme name in front of the indicator name in column B. Both must be separated by a pipe symbol, e.g. 'Theme 1|Male'.

Please note that it is currently not possible to add columns containing the confidence limits 'ul' and 'll' in this way. Also this functionality is not supported for the Double Map Template

## E.7. Exporting Data Files

To export your data to XML or JSON data files, you must have at least one active datasheet in your workbook. In other words, you must have at least one worksheet with a name that starts with 'iadasheet' (this can be typed with upper or lower case characters).

Click the 'InstantAtlas' menu in Excel and then click 'Export Data File'. Alternatively click the 'IA Export' button in the InstantAtlas toolbar (Figure 141).

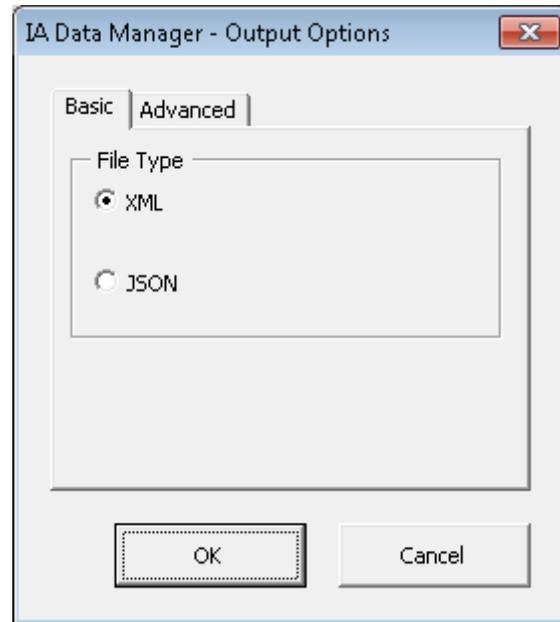
Figure 141



If the Excel Data Manager detects any problems with your workbook it will inform you at this stage. If your workbook has been correctly formatted, a dialog box will open in which you are asked to select the file type (Figure 142). Data files for Flash dynamic reports need to be in XML format whereas data files for HTML dynamic reports need to be in JSON format.



Figure 142



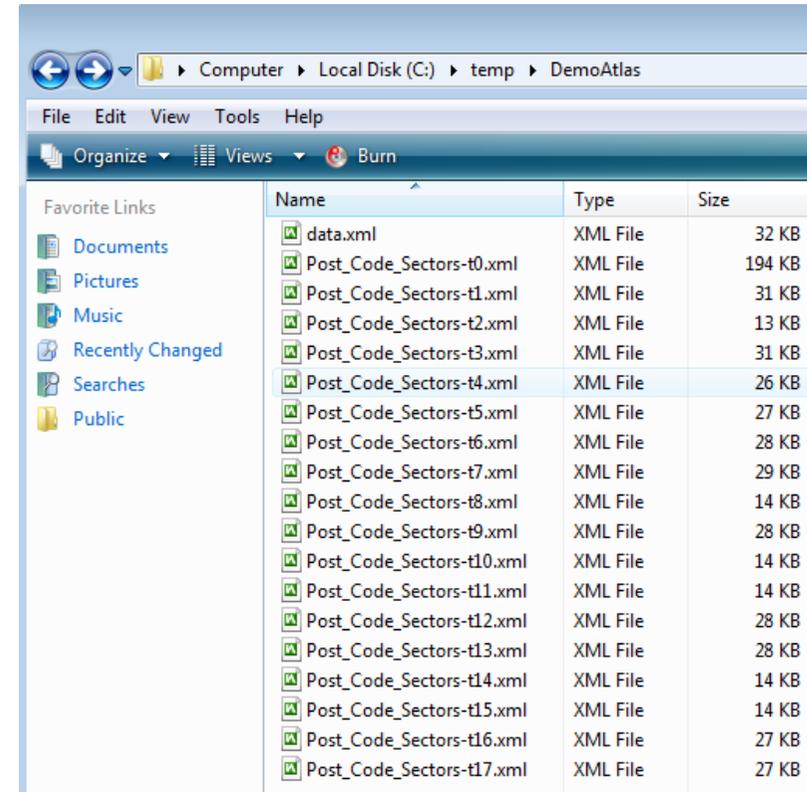
When you have made your selection, click on 'OK'. You will now be prompted to browse to a destination folder.

If you are creating data files for a report that you have not yet published or for use with InstantAtlas Server, you can save the data file anywhere in your file system. If you are creating data files for a dynamic report that has already been published, you should choose the folder containing the report and click 'Save' (this will overwrite any existing 'data.xml' / 'data.js' file).

If your workbook only contains one active datasheet, by default one 'data.xml' / 'data.js' file will be created. If your workbook contains more than one active datasheet (e.g. ladasheet1, ladasheet2, ladasheet3) then by default a 'data.xml' / 'data.js' file will be created along with a separate data file for each theme in your workbook.

For example, if you have eighteen themes worth of data located in two or more datasheets in your workbook and you are exporting to XML format, the set of XML data files created will be as shown in the following image (Figure 143).

Figure 143



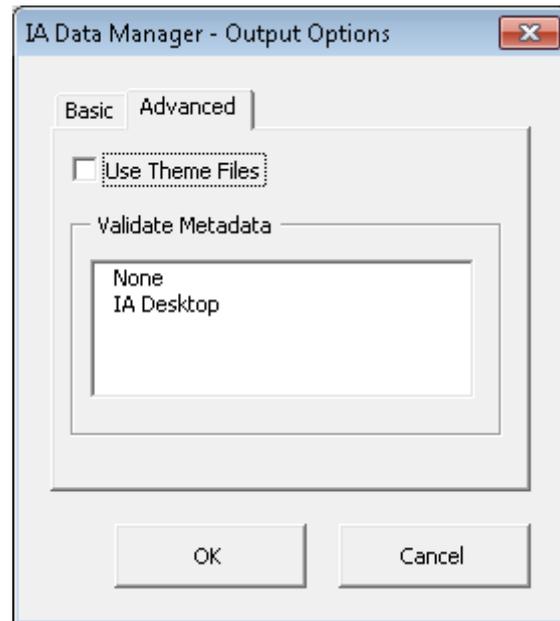
If you are displaying a large number of indicators or time periods in your report, we recommend that you enter this data in two or more datasheets. This becomes increasingly important as the number of geographic features in the base geography of your report increases. By storing the data in



multiple data files you ensure that your report will load data as efficiently as possible.

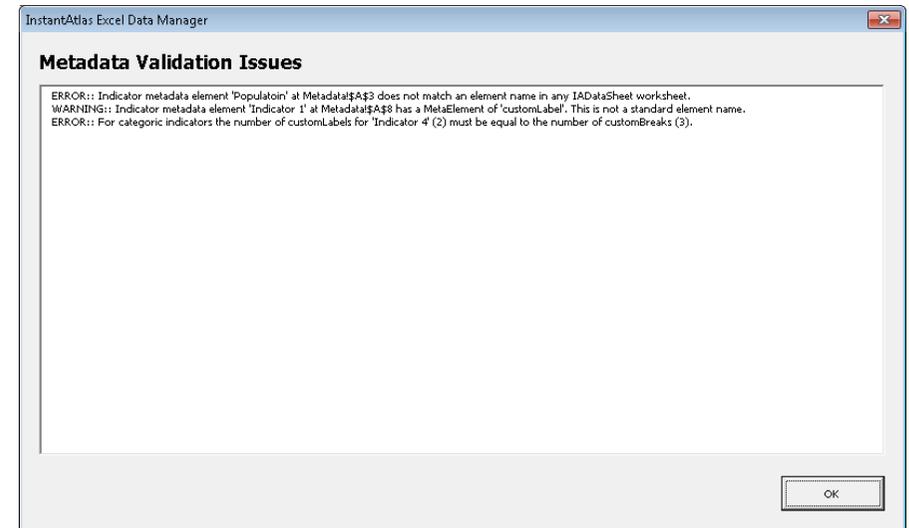
In the 'Advanced' tab of the 'Output Options' dialog (Figure 144) you can overwrite the default behaviour and choose whether or not the Excel Data Manager shall produce theme files or not.

Figure 144



The 'Advanced' tab also provides the option for a more detailed validation of the 'Metadata' worksheet(s). If you wish to validate your metadata, select 'IA Desktop' from the list and then click 'OK'. If the validation results in any errors or warning you will see a window listing them together with a brief description and a cell reference if applicable (Figure 145).

Figure 145



If errors are found, you should click 'OK' and correct the mistakes. If there are warnings only, you can choose to either cancel the export process by clicking on 'Cancel' or ignore them by clicking 'OK'. If you click 'OK', you will be prompted to browse to the destination folder.

## F. THE INSTANTATLAS BATCH PUBLISHER

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## F.1. About this Section

The Batch Publisher is a command-line interface version of the normal Publisher. It is useful when you need to publish large number (say 10 or more) of dynamic reports displaying data for different sets of geographic features. It makes the publishing of multiple reports easier because you do not have to click through the screens of the normal Publisher making selections. The Batch Publisher can be controlled using either the Excel or Access Data Managers but just the instructions for using the Excel Data Manager are given here.

The process for using the Batch Publisher is the following:

- a. You enter your indicator data for ALL of the geographic features into a single Excel workbook
- b. You define a “split” column that splits the geographic features into different dynamic reports
- c. You include a Publisher worksheet that provides the commands for running the Batch Publisher
- d. You click the ‘IA Export’ button in your Data Manager. This will generate the data XML files and will also trigger the Batch Publisher to run.

These steps are explained in further detail in the following sections.

**Note:** Before using this guide you should read sections ‘B. The InstantAtlas Desktop Publisher’ and ‘E. The InstantAtlas Excel Data Manager’.

## F.2. Setting up the Excel Workbook

It is important that you use the workbook called IAWorkbook\_Batch.xls supplied with your InstantAtlas software. It is located in the ‘workbooks’ folder created during the installation of your InstantAtlas software. By default the path to this file is C:\Program Files\GeoWise\InstantAtlas\workbooks. It is important to use a copy of IAWorkbook\_Batch.xls because it contains several worksheets called ‘Publisher-xxx’ that have functions in column B. These functions can be seen by clicking on a cell in this column and looking at the ‘name box’ in the top left corner of Excel. This will contain a function name instead of the cell address, i.e. ‘ConfigFile’ instead of ‘B7’. These functions are required for the Batch Publisher to work. Note that it is not possible to use your clipboard to copy and paste the contents of the functions of one of the Publisher worksheets to another workbook. If you need to copy the whole Publisher worksheet inclusive the functions, you should do this by right-clicking the name of the worksheet at the bottom and select ‘Move or Copy...’.

The example that is used below is for post code sectors in Edinburgh. Imagine that you have the data for these and you wish to split the post code sectors into five separate dynamic reports representing different parts of Edinburgh: Centre, North, South, East and West. You do not wish to manually click through the normal Publisher wizard five times to publish the five individual reports – instead you wish to use the Batch Publisher.



### F.2.1. The Geography and Filters Worksheet

The 'Geography and Filters' worksheet should be edited first. Columns A and B should contain the code and name of every post code sector in Edinburgh. Optionally, column C can contain a URL to an external file containing supporting information for each post code sector. Column D will be the split column that defines which report each post code sector will be published in (Figure 146). Columns E onwards should contain any filters you wish to include in your report.

Figure 146

1	A	B	C	D
2	polygon	Post Code Sectors	Link	split Zones
3	EH11	EH1 1	<a href="#">notes.htm</a>	Edinburgh Centre
4	EH12	EH1 2	<a href="#">notes.htm</a>	Edinburgh Centre
5	EH13	EH1 3	<a href="#">notes.htm</a>	Edinburgh Centre
6	EH104	EH10 4	<a href="#">notes.htm</a>	Edinburgh South
7	EH105	EH10 5	<a href="#">notes.htm</a>	Edinburgh South
8	EH106	EH10 6	<a href="#">notes.htm</a>	Edinburgh South
9	EH107	EH10 7	<a href="#">notes.htm</a>	Edinburgh South
10	EH141	EH14 1	<a href="#">notes.htm</a>	Edinburgh West
11	EH142	EH14 2	<a href="#">notes.htm</a>	Edinburgh West
12	EH143	EH14 3	<a href="#">notes.htm</a>	Edinburgh West
13	EH144	EH14 4	<a href="#">notes.htm</a>	Edinburgh West
14	EH145	EH14 5	<a href="#">notes.htm</a>	Edinburgh West
15	EH146	EH14 6	<a href="#">notes.htm</a>	Edinburgh West

Cell D1 must contain 'split'. Cell D2 can be used optionally to supply a name for your split column although - this is just for your benefit as it is not used by the software. From row 3 downwards the split column must contain the name of a part of Edinburgh. Post code sectors with the same value in column D will be published in the same report. Note that no filter columns have been included in this example. These could be added in

columns E onwards if required and the entry in row 1 would be 'filter' for any filter columns.

### F.2.2. The Datasheets

Enter your data values into one or more datasheets. In this example, there is just one theme, two indicators and two time periods per indicator (Figure 147).

Figure 147

	A	B	C	D	E	F
1			Theme 1			
2			Indicator 1		Indicator 2	
3			notes.htm	notes.htm	notes.htm	notes.htm
4			numeric		numeric	
5	Codes	Names	2004	2005	2004	2005
6	EH11	EH1 1	25.10	8.41	69.18	67.72
7	EH12	EH1 2	16.22	7.01	63.98	62.89
8	EH13	EH1 3	19.36	7.12	44.99	37.46
9	EH104	EH10 4	9.66	3.68	34.75	32.74
10	EH105	EH10 5	5.18	3.58	21.58	17.99
11	EH106	EH10 6	3.23	2.18	7.42	6.71
12	EH107	EH10 7	3.36	1.73	2.94	2.97
13	EH141	EH14 1	8.86	4.94	46.74	40.93
14	EH142	EH14 2	11.23	6.16	61.20	55.98
15	EH143	EH14 3	17.78	8.80	62.75	50.29

### F.2.3. The Publisher Worksheet

For the Batch Publisher to work you need a worksheet called 'Publisher' in your Excel workbook. The example workbook IWorkbook\_Batch.xls contains 4 examples of this worksheet depending on what kind of background mapping you wish to use. The functions behind the cells are the same in all four 'Publisher-xxx' worksheets and you can change one into another by changing the values in column B. The different Publisher



worksheets are simply included as examples to make it easier for you to set up your own Publisher worksheet.

To make one of the Publisher worksheets active you need to rename it to be called 'Publisher'.

The values you put into column B of the Publisher worksheet control the Batch Publisher. Each setting is described below. Not all of them are mandatory. Note that the default settings make use of the shape files supplied with the InstantAtlas software.

The settings of row 2 to row 18 are identically in all four example Publisher worksheets (Figure 148).

Figure 148

	A	B
1	<b>Setting</b>	<b>Value</b>
2	Publish	Yes
3	Update Files Only	
4	Publisher Folder	C:\Program Files\GeoWise\InstantAtlas\
5	Publisher Executable	iapcmd.exe
6	Area Selection	Data
7	Project File	
8	Template	C:\ProgramData\GeoWise\InstantAtlas\templates\InstantAtlasSingleFlash6.5.2.zip
9	Config File	C:\config.xml
10	Stylesheet	C:\default.css
11	Base File	C:\Program Files\GeoWise\InstantAtlas\maps\post_code_sectors.shp+PCS_CODE+PCS_NA
12	Data File Folders	
13	Folder for Zip File	C:\reports
14	Destination Folder	C:\reports
15	Contextual Layers	C:\Program Files\GeoWise\InstantAtlas\maps\post_code_districts.shp+PCD_CODE+PCD_NA
16	Contextual Clip	TRUE
17	Editable Settings Token	
18	Editable Settings	mapMargin=20% reportTitle=My Report layerBorderWidth=1;2

**Publish:** this can either be set to 'Yes' or 'No' according to whether you wish to use the Batch Publisher or not.

**Update Files Only:** this should be left blank if you wish to Publish a new set of reports. If you only want to update the data files in a set of already

published reports, you should set this property to 'Yes'. The data files will be saved into subfolders of the destination folder if these subfolders have the same name as the split values.

**Publisher Folder:** the full pathname for the folder in which the command-line interface publisher executable (iapcmd.exe) is located.

In all example Publisher worksheets this is:  
'C:\Program Files\GeoWise\InstantAtlas'.

**Publisher Executable:** the name of the command line version of the Publisher. This should always be 'iapcmd.exe'

**Area Selection:** This should be set to 'Data' if you wish the reports to only include the base geography features which are part of the respective split value. If you wish to display a map for all the areas of the base geography map file (not just for those that will show data in your report) use 'Base'.

**Project File:** If you have all setting for your batch reports already saved in an InstantAtlas Publisher project file you can enter the full path to this file here. The settings from the project file will override all other settings of the Publisher worksheet with exception of the data file (or demo data) which got selected in the Publisher when creating the project file. The data will be the data from within your Excel workbook.

**Template:** the full pathname for the template you wish to use. The templates are archives (zip) located in the 'templates' folder which was created as part of your InstantAtlas installation. The location of this folder depends upon your operating system.



For Windows XP the folder can be found in the following location:

C:\Documents and Settings\All Users\Application data\GeoWise\Instant Atlas\templates

For Windows Vista and Windows 7 the default folder is located at:

C:\ProgramData\GeoWise\InstantAtlas\templates

In all example Publisher worksheets we have used the following (default windows Vista) location:

'C:\ProgramData\GeoWise\InstantAtlas\templates\InstantAtlasSingleFlash6.5.2.zip'

An example location of a version 6 single map template on Windows XP would therefore be:

'C:\Documents and Settings\All Users\Application data\GeoWise\Instant Atlas\templates\InstantAtlasSingleFlash6.5.2.zip'

**Config File:** optionally you can enter the full pathname for a custom configuration file (config.xml) that you wish to be used for the published reports. If you do not enter a pathname, the template default configuration file will be used.

In all example Publisher worksheets this is 'C:\config.xml'.

**Stylesheet:** optionally you can enter the full pathname for a custom style sheet (default.css) that you wish to be used for the published reports. If you do not enter a pathname, the template default style sheet will be used.

In all example Publisher worksheets this is 'C:\default.css'.

**Base File:** This setting is made up of:

1. the full pathname for the digital map file (ESRI shape file, MapInfo MID/MIF, MapInfo TAB file) containing the base geography for the series of reports you wish to publish,
2. the feature code field in your base geography digital map file (note that this field is case sensitive and that the codes of your digital map file must be exactly the same as those in column A of the Geography and Filters worksheet),
3. the feature name field in your base geography digital map file (note that this field is case sensitive) and
4. optional - the label for the base geography that will be displayed in the legend of your published reports. If you do not specify a label, the layer will be shown in the legend with its original map file name.

These parameters must be delimited by a '+' sign.

In all example Publisher worksheets the selected digital map file is an ESRI shape file called 'post\_code\_sectors.shp' that contains post code sector boundaries for Edinburgh. This file is saved onto your computer during the installation of InstantAtlas. The default location is C:\Program Files\GeoWise\InstantAtlas\maps

ESRI shape files have a .shp file extension (e.g. districts.shp). MapInfo interchange (also referred to as MID/MIF) files have a .mif file extension (districts.mif). MapInfo Table files (TAB files) have a .tab extension (districts.tab). All are accompanied by supporting files. You must have a digital map file in one of these formats to be able to publish a dynamic report (a .shp .mif or .tab file). You will also need a .dbf file with the same



name as the .shp file (districts.dbf) or a .MID file with the same file name as the .MIF file (districts.MID). For TAB files, you will need a range of other supporting files including .DAT, .ID, .MAP and .IND. These files need to be located within the same folder as the digital map files. Supporting files should all be supplied with either your Shape, MID/MIF or TAB files by the provider of your digital map data.

The field in the chosen digital map file (post\_code\_sectors.shp) that contains codes is called 'PCS\_CODE'. The names are stored in the field called 'PCS\_NAME'.

The label for the legend shall be 'Post Code Sectors'.

Connecting these parameters together using the '+' sign results in:  
C:\Program Files\GeoWise\InstantAtlas\maps\post\_code\_sectors.shp+PCS\_CODE+PCS\_NAME+Post Code Sectors

If you wish to create reports with more than one base geography layer, please refer to section 'F.5. Creating Multiple Geography Reports'.

**Data File Folders:** Leave this property blank if you wish to create reports with just one base geography layer. You will only need this property if you want to create Multiple Geography Reports using the Batch Publisher. Please refer to section 'F.5. Creating Multiple Geography Reports'.

**Folder for Zip File:** the full pathname for the folder in which you want the zipped reports to be saved.

In all example Publisher worksheets this is 'C:\reports'.

**Destination Folder:** optionally you can enter the full pathname for the folder to which you want the zipped reports to be unpacked to. This can be the same folder as that specified for the 'Folder for Zip File' setting. If you do not enter a pathname, the zipped reports will not be unpacked.

In all example Publisher worksheets this is 'C:\reports'.

**Contextual Layers:** optionally you can enter the full pathnames to any contextual layers you wish to include in your reports. For each contextual geography you must supply the following:

- a. The full pathname for the digital map file (shape file, MID/MIF or TAB)
- b. The feature code and name fields in the digital map file
- c. The label for the contextual geography that you wish to be displayed in the Map Layers list of the published reports

This information should take the form of a semi-colon delimited list. For each contextual geography, information should be delimited by a '+' sign.

In this example a single contextual layer has been entered as 'C:\Program Files\GeoWise\InstantAtlas\maps\post\_code\_districts.shp+PCD\_CODE+PCD\_NAME+Post Code Districts'. The digital map file is an ESRI shape file called 'post\_code\_districts.shp'. The feature code and name fields in this digital map file are called 'PCD\_CODE' and 'PCD\_NAME' respectively. The label for the contextual geography that will be displayed in the published reports is 'Post Code Districts'.

If you wanted to add a digital map file with Local Authorities as a second contextual geography, your entry might look like this:



'C:\Program Files\GeoWise\InstantAtlas\maps\post\_code\_districts.shp+PCD\_CODE+PCD\_NAME+Post code districts; C:\local\_authorities.shp+LA\_CODE+LA\_NAME+Local Authorities'

**Contextual Clip:** this field should be set to 'True' if you wish to include only contextual geography features that overlap the base geography. If you wish to include all contextual geography features you should set this to 'False'.

**Editable Settings Token:** This character should be used as a delimiter between multiple Editable Settings (see next property below).

In the example the token is a pipe symbol ('|')

**Editable Settings:** optionally you can enter a list of editable settings. As a delimiter you need to use the character defined in the 'Editable Settings Token' property. In the example workbook the map margin is set to be 20%, the report title is 'My Report', the border width of the base layer is 1px the contextual layer has a border width of 2px.

This is a list of available editable settings for Flash dynamic reports:

Editable Setting	Example
mapMargin	mapMargin=20%
<b>Description:</b> Sets the distance between the border of the map component and the base layer.*	
reportTitle	reportTitle=My Report
<b>Description:</b> Changes the title of the atlas.html page. The title is displayed in the title bar of your browser and in the browser tab.	

Editable Setting	Example
layerBorderWidth	layerBorderWidth=1;1.5;2
<b>Description:</b> A semi-colon delimited list of pixel values for the digital map layers. The first value defines the border width of the base layer followed by the border width settings for the contextual layers in the same order as defined in the 'Contextual Layer' property.	
layerFillOpacity	layerFillOpacity=0.7;0;1
<b>Description:</b> A semi-colon delimited list of opacity values for the contextual map layers in the same order as defined in the 'Contextual Layer' property. 0 means totally transparent and 1 means totally opaque.	
layerIconPath	layerIconPath=C:\icon.png
<b>Description:</b> A semi-colon delimited list of paths to icon files which the map shall display for contextual point layers instead of the default circle. To be set in the same order as defined in the 'Contextual Layer' property.	
reportKeywords	reportKeywords=population changes, health indicators, crime incidences, election results
<b>Description:</b> During publishing, these keywords will be saved as a meta tag in the atlas.html file. They are helpful if you want your report to be found by search engines. Ideally you would provide 3-4 keywords about the topic of your report.	
reportDescription	reportDescription=This is my report with indicators about population, health, crime and elections for my city.
<b>Description:</b> During publishing, this description will be saved as a meta tag in the atlas.html file. It is helpful if you want your report to be found by search engines. Ideally you would provide a description about the topic of your report with approx. 155 characters.	



This is a list of available editable settings for dynamic reports published with an HTML template:

Editable Setting	Example
mapMargin	mapMargin=20%
<b>Description:</b> Sets the distance between the border of the map component and the base layer.*	
reportTitle	reportTitle=My Report
<b>Description:</b> Changes the title of the atlas.html page. The title is displayed in the title bar of your browser and in the browser tab.	
layerVisible	layerVisible=true;false>true
<b>Description:</b> A semi-colon delimited list of 'true' or 'false' values to set if the map layers are visible in the map by default. The first value defines the visibility of the base layer followed by the visibility settings for the contextual layers in the same order as defined in the 'Contextual Layer' property.	
baseLayerSymbolSize	baseLayerSymbolSize=18
<b>Description:</b> Sets the size of the legend symbols for the base layer. Does not apply when proportional points or lines are used. Max and min sizes for proportional symbols can be set in the Designer.	
contextualLayerSymbolSize	contextualLayerSymbolSize=12;15
<b>Description:</b> A semi-colon delimited list of pixel values to set the size of the legend symbols for the contextual layers.	
baseLayerFillOpacity	baseLayerFillOpacity=0.7
<b>Description:</b> Sets the opacity for the base layer. 0 means totally transparent and 1 means totally opaque.	

Editable Setting	Example
contextualLayerFillOpacity	contextualLayerFillOpacity=0;1
<b>Description:</b> A semi-colon delimited list of opacity values for the contextual map layers in the same order as defined in the 'Contextual Layer' property. 0 means totally transparent and 1 means totally opaque.	
baseLayerFillColor	baseLayerFillColor=#cccccc
<b>Description:</b> Sets the fill colour in hexadecimal format for the base layer. This colour appears when a feature is not part of the legend classification, e.g. when it is not part of an applied filter.	
contextualLayerFillColor	contextualLayerFillColor=#ffcc00;#0000ff
<b>Description:</b> A semi-colon delimited list of fill colours in hexadecimal format for the contextual map layers in the same order as defined in the 'Contextual Layer' property.	
layerBorderThickness	layerBorderThickness=1;1.5;2
<b>Description:</b> A semi-colon delimited list of pixel values for the digital map layers. The first value defines the border thickness of the base layer followed by the border thickness settings for the contextual layers in the same order as defined in the 'Contextual Layer' property.	
contextualLayerBorderColor	contextualLayerBorderColor=#ffcc00;#0000ff
<b>Description:</b> A semi-colon delimited list of border colours in hexadecimal format for the contextual map layers in the same order as defined in the 'Contextual Layer' property.	



Editable Setting	Example
baseLayerBorderColor	baseLayerBorderColor=#000000
<b>Description:</b> Sets the border colour in hexadecimal format for the base layer.	
layerShowLabels	layerShowLabels=false;false;true
<b>Description:</b> A semi-colon delimited list of 'true' or 'false' values to set if labels should show in the map for the map layer features. The first value defines the visibility of feature labels for the base layer followed by the visibility of feature labels for the contextual layers in the same order as defined in the 'Contextual Layer' property.	
layerMinLabelExtent	layerMinLabelExtent=0;0;10000
<b>Description:</b> A semi-colon delimited list of minimum label extents in map units for the map layers. The first value defines the minimum label extents for the base layer followed by the minimum label extents for the contextual layers in the same order as defined in the 'Contextual Layer' property. For layers which are not supposed to show labels (layerShowLabels=false), the layerMinLabelExtent value can be left blank.	
layerMaxLabelExtent	layerMaxLabelExtent=1000000;1000000;500000
<b>Description:</b> A semi-colon delimited list of maximum label extents in map units for the map layers. The first value defines the maximum label extents for the base layer followed by the maximum label extents for the contextual layers in the same order as defined in the 'Contextual Layer' property. For layers which are not supposed to show labels (layerShowLabels=false), the layerMaxLabelExtent value can be left blank.	

Editable Setting	Example
baseLayerShowDataTips	baseLayerShowDataTips=true
<b>Description:</b> Sets if the base layer features should show data tips when hovered with the mouse.	
contextualLayerShowDataTips	contextualLayerShowDataTips=true;false
<b>Description:</b> A semi-colon delimited list of 'true' or 'false' values to set if the contextual layer features should show data tips when hovered with the mouse. To be set in the same order as defined in the 'Contextual Layer' property.	
baseLayerShowInLayerList	baseLayerShowInLayerList=true
<b>Description:</b> Sets if the base layer should appear in the legend.	
contextualLayerShowInLayerList	contextualLayerShowInLayerList=false;true
<b>Description:</b> A semi-colon delimited list of 'true' or 'false' values to set if the contextual layers should appear in the legend. To be set in the same order as defined in the 'Contextual Layer' property.	
contextualLayerIconPath	contextualLayerIconPath=C:\icon.png
<b>Description:</b> A semi-colon delimited list of paths to icon files which the map shall display for contextual point layers instead of the default circle. To be set in the same order as defined in the 'Contextual Layer' property.	

\* Possible values for map margins are: none, 1%, 2%, 5%, 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90% and 100%. If you use Google



Maps as a background layer we suggest you use 'none' since the map will adjust itself to one of the zoom levels provided by Google maps.

The values for the settings in row 19 to 32 are different in each of the four example Publisher worksheets.

**Background Type:** Please specify here the type of background layer you wish to include into your reports. Valid values are 'Raster' (for a raster background image collection locally saved on your computer or a shared drive), 'WMS' (for a Web Map Service), 'ArcGIS' (for an ArcGIS Server/ ArcGIS Online connection) and 'Google' (for Google Maps). If you do not want to include any background mapping, please leave this property and all following settings blank.

#### *F.2.3.1. Using a Raster Image Collection as a Background Layer*

If your Background Type is 'Raster', please refer to the worksheet 'Publisher-Raster' (Figure 149)

Figure 149

	A	B
19	Background Type	Raster
20	Raster Layers	C:\Program Files\GeoWise\InstantAtlas\images\UK_Miniscale_XYZ.xml
21	Raster Copy	TRUE
22	Raster Clip	TRUE
23	ArcGIS/WMS Url	
24	ArcGIS/WMS Name	
25	ArcGIS/WMS Layers	
26	ArcGIS Coordsys/WMS ScsCode	
27	WMS OGC Version	
28	ArcGIS/WMS Parameters	
29	Google Map Type	
30	Google API Key	
31	Google Layer Name	
32	Reproject	
33	Additional Parameters	
34		

**Raster Layers:** Optionally you can enter the full pathnames to any background mapping index files (xml).

In the example this is 'C:\Program Files\GeoWise\InstantAtlas\images\UK\_Miniscale\_XYZ.xml'.

If you wanted to add a second index file, your entry might look like this:

```
'C:\Program Files\GeoWise\InstantAtlas\images\UK_Miniscale_XYZ.xml;
C:\Program Files\GeoWise\InstantAtlas\images\os250k.xml'
```

**Raster Copy:** This field should be set to 'True' if you wish background mapping images to be copied to the output folders of the published reports. Note that images files will only be copied over if they are located in the same folder as the index files. If you do not wish background mapping images to be copied to the output folders of your published reports, set this to 'False'.

**Raster Clip:** This field should be set to 'True' if you wish to display only background images that overlap the base geography in your published reports. To display all background images, set this to 'False'.

#### *F.2.3.2. Using a Web Map Service as a Background Layer*

If your Background Type is 'WMS', please refer to the worksheet 'Publisher-WMS' (Figure 150)



Figure 150

	A	B
19	Background Type	WMS
20	Raster Layers	
21	Raster Copy	
22	Raster Clip	
23	ArcGIS/WMS Url	<a href="http://www2.demis.nl/WMS/wms.ashx?wms=WorldMap">http://www2.demis.nl/WMS/wms.ashx?wms=WorldMap</a>
24	ArcGIS/WMS Name	Demis WMS
25	ArcGIS/WMS Layers	Airports,Bathymetry,Topography,Hillshading,Builtup+areas,Rivers,Stream
26	ArcGIS Coordsys/WMS ScsCode	EPSG:4326
27	WMS OGC Version	1.1.1
28	ArcGIS/WMS Parameters	&format=image/png&bgcolor=0xfffff&transparent=FALSE
29	Google Map Type	
30	Google API Key	
31	Google Layer Name	
32	Reproject	TRUE
33	Additional Parameters	
34		

**ArcGIS/WMS Url:** Optionally you can include a Web Map Service as a background mapping. Therefore type the URL for the WMS into this field.

In the example a connection to the free global WMS from Demis in the Netherlands is used.

**ArcGIS/WMS Name:** The name of the WMS layer as it will appear in the legend of your report. To see this name you will need to disable the 'Single Background Mapping Button?' option in the map properties of the config file. In the example this is 'www2.demis.nl'.

In reports published with an HTML template there is no property 'Single Background Mapping Button?' in the config.xml file. All background layers will show with their specific name in the legend.

If you don't know the values for the following settings you might want to request the properties of the WMS with the GetCapabilities request. Therefore type into the URL field of your internet browser the url of the

WMS you want to use followed by '&REQUEST=GetCapabilities'. This will offer you a file in xml format with the properties of the WMS including coordinate system, version number, available image formats and available layers.

**ArcGIS/WMS Layers:** A comma delimited list of WMS layers you want to include.

**ArcGIS Coordsys/WMS ScsCode:** This is the coordinate system of the WMS. For the WMS from Demis this is 'EPSG:4326'

**WMS OGC Version:** The version number of the WMS. For the Demis WMS this is '1.1.1'. This field is mandatory if you want to have the Batch Publisher re-project your map layers into the WMS projection.

**ArcGIS/WMS Parameters:** Parameters for image format, background colour and transparency. The parameter names are 'format', 'bgcolor' and 'transparent' and they must have an ampersand ('&') as a prefix.

In the example workbook we have chosen:

'&format=image/png&bgcolor=0xfffff&transparent=FALSE'

**Reproject:** For a WMS background to work, all map layers need to be in the same projection as WMS. Set this property to 'True' if you wish the Batch Publisher to re-project your map layers. If your map layers are already in the correct projection you should set this property to 'False'. Please refer to 'B.3.5.2 Adding Images from a WMS Connection' for important information on the re-projection functionality and its limitations.



Since the demo map files for Edinburgh post code sectors and districts are not in the Demis WMS projection, this property is set to 'True' in the example.

### F.2.3.3. Using an ArcGIS Server/ArcGIS Online connection as a Background Layer

If your Background Type is 'ArcGIS', please refer to the worksheet 'Publisher-ArcGIS' (Figure 151)

Figure 151

	A	B
19	Background Type	ArcGIS
20	Raster Layers	
21	Raster Copy	
22	Raster Clip	
23	ArcGIS/WMS Url	<a href="http://server.arcgisonline.com/ArcGIS/rest/services/World_Street_Map/MapServer/export?">http://server.arcgisonline.com/ArcGIS/rest/services/World_Street_Map/MapServer/export?</a>
24	ArcGIS/WMS Name	ArcGIS Layer
25	ArcGIS/WMS Layers	0
26	ArcGIS Coordsys/WMS ScsCode	102100
27	WMS OGC Version	
28	ArcGIS/WMS Parameters	
29	Google Map Type	
30	Google API Key	
31	Google Layer Name	
32	Reproject	TRUE
33	Additional Parameters	
34		

The properties ArcGIS/WMS Url, ArcGIS/WMS Name, ArcGIS/WMS Layers, ArcGIS Coordsys/WMS ScsCode, ArcGIS/WMS Parameters and Reproject should be used respectively as explained for the WMS background layer.

The example shows the settings for the ArcGIS World Street Map connection in the coordinate system Web Mercator Auxiliary Sphere (102100). This connection contains a single layer which is called '0'.

### F.2.3.4. Using Google Maps as a Background Layer

If your Background Type is 'Google', please refer to the worksheet 'Publisher-Google' (Figure 152)

Figure 152

	A	B
19	Background Type	Google
20	Raster Layers	
21	Raster Copy	
22	Raster Clip	
23	ArcGIS/WMS Url	
24	ArcGIS/WMS Name	
25	ArcGIS/WMS Layers	
26	ArcGIS Coordsys/WMS ScsCode	
27	WMS OGC Version	
28	ArcGIS/WMS Parameters	
29	Google Map Type	hybrid
30	Google API Key	ABQIAAAA_i0Y9Kyb91O9-vADrHN23RQ35I93q6hwsWAOxjsO3gg7mr1XSRRJzdqHlk
31	Google Layer Name	My Google Maps Layer Name
32	Reproject	TRUE
33	Additional Parameters	
34		

**Google Map Type:** This is where you can set the default Google Map type that loads with the report. Settings include 'normal' (for street map), 'satellite', 'hybrid' or 'physical' (for terrain). The end-user can switch between these map types via a drop-down list in the map component.

In the example the hybrid map type is chosen.

**Google API Key:** To use Google Maps in a Flash dynamic report on a web server, you will need an API Key from Google which is specific to the web domain. Please refer to 'G. Google Maps in InstantAtlas Reports' for further information.



When using an HTML template you will not need to enter an API key. However there may be some benefits from using an API key such as allowing you to monitor the Maps API usage in your dynamic report. Please see the following link for further details:

[https://developers.google.com/maps/documentation/javascript/tutorial#api\\_key](https://developers.google.com/maps/documentation/javascript/tutorial#api_key)

**Google Layer Name:** The name of the Google Maps layer as it will appear in the legend of your report, provided that the ‘Single Background Mapping Button?’ option in the map properties of the config file is disabled. In this example it is called ‘My Google Maps Layer Name’.

In reports published with an HTML template there is no property ‘Single Background Mapping Button?’ in the config.xml file. All background layers will show with their specific name in the legend.

**Reproject:** For a Google Maps background to work, all map layers need to be in the same projection as Google Maps. This projection is called Web Mercator Auxiliary Sphere. If you wish the Batch Publisher to re-project your map layers for you set this property to ‘True’. If your map layers are already in the same projection as Google Maps, you should set this property to ‘False’. Please refer to ‘G. Google Maps in InstantAtlas Reports’ for important information on the re-projection functionality and its limitations.

Since the demo map files for Edinburgh post code sectors and districts are not in the Google Maps projection, this property is set to ‘True’ in the example.

**Additional Parameters:** This is a place holder for any additional parameters that you might want to include into your batch reports. Please leave this blank unless you are told otherwise by your support provider.

### F.3. Individual Settings for each Report

It is possible to define individual editable settings for each report created during the batch publishing process. These settings are defined in the metadata sheet. For example, if you were creating multiple reports on the post code sectors of Edinburgh and wished to change the report title of each individual report to be specific to the generated report then you would add the following to your metadata sheet (Figure 153)

Figure 153

	A	B	C	D
1	<b>ElementType</b>	<b>Element</b>	<b>MetadataElement</b>	<b>Value</b>
2	Atlas	Edinburgh Centre	AtlasTitle	reportTitle=This is the Edinburgh Centre report
3	Atlas	Edinburgh South	AtlasTitle	reportTitle=This is the Edinburgh South report
4	Atlas	Edinburgh West	AtlasTitle	reportTitle=This is the Edinburgh West report
5	Atlas	Edinburgh East	AtlasTitle	reportTitle=This is the Edinburgh East report
6	Atlas	Edinburgh North	AtlasTitle	reportTitle=This is the Edinburgh North report
7				

This will then set each report to have a different title.

It is also possible to use any of the other editable settings defined in the list of available editable settings for Flash and HTML dynamic reports. If you wish to find out how to use these then please contact your support provider.



## F.4. The Publishing Process

Once you have edited the above settings and ensured that you have activated one of the Publisher worksheets by renaming it to 'Publisher', click the 'InstantAtlas' menu in Excel and then click 'Export Data File'. Alternatively click the 'IA Export' button in the InstantAtlas toolbar.

Choose the file type and any output folder and click 'Save'. Data files will be created in this folder.

Multiple instances of the Batch Publisher will open and close automatically as publishing progresses. ZIP Archives (.zip) containing published reports will be saved in the folder specified for the 'Folder for Zip File' setting. The dynamic reports will be unpacked to the folder specified for the 'Destination Folder' setting. Depending on the number of reports you are publishing and the number of geographic features in each report this process may take minutes or hours.

In this example five ZIP archives would be created in a folder called 'reports' on the computer's C: drive. These would be unpacked to the same folder, automatically creating five subfolders with the names corresponding to your split values (the parts of Edinburgh in this example). Each subfolder would contain a dynamic report displaying post code sectors for a part of Edinburgh.

## F.5. Creating Multiple Geography Reports

It is possible to use the Batch Publisher to create reports with multiple base geographies. Please read section 'H. Multiple Geography Reports' first to

understand how to create such reports with the Desktop Publisher before reading further.

Imagine you wish to create reports with Edinburgh post code districts as your first base geography layer, the centroids of the Edinburgh post code sectors as your second base geography layer and a final base geography layer of the boundaries of the Edinburgh post code sectors. Then you wish to create one report for each of the five different parts of Edinburgh: Centre, North, South, East and West.

You will need one workbook for each base layer, all of which need to have same split values in the 'Geographies and Filters' worksheet. Only the Excel workbook of the last layer needs a 'Publisher' worksheet.

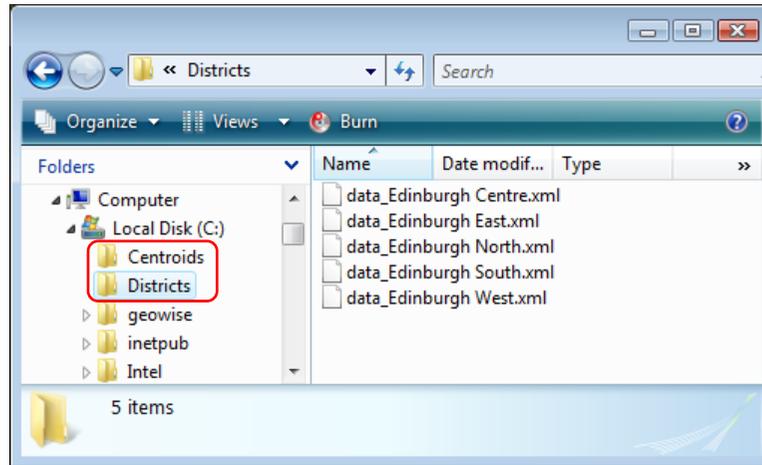
For the example with the Edinburgh post code data you will need three workbooks one with the data for the post code districts, one with the data for the centroids of the post code sectors and one with the data of the post code sector boundaries. All of them need to have a 'split' column in the 'Geographies and Filters' worksheet with one of the values 'Edinburgh Centre', 'Edinburgh North', 'Edinburgh South', 'Edinburgh East' and 'Edinburgh West' assigned to each of the geography features. Only the last one – the workbook with the data for the post code sector boundaries – will need a 'Publisher' worksheet.

The next step is to export the data of all workbooks using the 'IA Export' button of the Excel Data Manager with exception of the workbook for the last base geography (the one with the Publisher worksheet). Save the resulting split files into separate folders, one for each base layer. The naming of folders is irrelevant.



In the example with the Edinburgh post code data you should export the workbooks for the first two layers (post code districts and post code sector centroids) into two separate folders. During the export the Excel Data Manager creates five split data files for each workbook (Figure 154).

Figure 154



In the workbook of the last base geography layer enter in the 'Publisher' worksheet under 'Base File' a semi-colon delimited list of all base geography layers together with their code field, name field and alias. The order needs to be the same as the order you wish to see them in the report.

In the 'Data File Folders' property enter a semi-colon delimited list of absolute paths to the folders containing the data split files of all base layers besides the last one. The order needs to be the same as for the 'Base Files'.

In the example with the Edinburgh post code data the 'Publisher' worksheet would be part of the workbook which contains the data for the Edinburgh post code sector boundaries. The entries for the 'Base Files' and 'Data File Folders' would look like in Figure 155.

Figure 155

Setting	Value
1 Publish	Yes
2 Update Files Only	Yes
3 Publisher Folder	C:\Program Files\GeoWise\InstantAtlas\
4 Publisher Executable	iapcmd.exe
5 Area Selection	Data
6 Project File	
7 Template	C:\ProgramData\GeoWise\InstantAtlas\templates\Testing\InstantAtlasSingleFlash6.5.0.zip
8 Config File	C:\config.xml
9 Stylesheet	C:\default.css
10	C:\Program Files\GeoWise\InstantAtlas\maps\post_code_districts.shp+PCD_CODE+PCD_NAME+Post Code Districts;C:\Program Files\GeoWise\InstantAtlas\maps\post_code_sectors_centroids.shp+PCS_CODE+PCS_NAME+Post Code Sector Centroids;C:\Program Files\GeoWise\InstantAtlas\maps\post_code_sectors.shp+PCS_CODE+PCS_NAME+Post Code Sectors
11 Base File	C:\Program Files\GeoWise\InstantAtlas\maps\post_code_sectors.shp+PCS_CODE+PCS_NAME+Post Code Sectors
12 Data File Folders	C:\Districts;C:\Centroids
13 Folder for Zip File	C:\reports
14 Destination Folder	C:\reports
15 Contextual Layers	
16 Contextual Clip	

If required you may set a border width for your base geography layers or contextual layers using 'layerBorderWidth' in the 'Editable Settings' property. Please note that the values are assigned first in the order of the base layers and then to the contextual layers in their order. For the example with the Edinburgh post code data a setting of 'layerBorderWidth=1;2;1;3;2' would result in the following:

Post Code Districts	border width of 1px
Post Code Sector Centroids	border width of 2px
Post Code Layers	border width of 1px
First contextual layer	border width of 3px
Second contextual layer	border width of 2px



In the same way, if you are using an HTML template you can define layer specific editable settings for multiple base layers by providing a semi-colon delimited list of values.

Once all settings are defined you can use the 'IA Export' button to start the batch publishing process.

## F.6. How to Debug the Batch Publisher

If the batch publisher is not executing correctly then it is worthwhile entering the debugging mode.

Enter the following into the Publisher Worksheet (Note these are case sensitive)

cell A35:        debug

cell B35:        yes

Then type 'Debug' into the name box of cell B35.

cell A36:        commandline

cell B36:        Do not type anything in this cell, leave it blank.

Then type 'CommandLine' into the name box of cell B36.

You should end up with an example looking like the one below (Figure 156).

Figure 156

	A	B
19	Background Type	Google
20	Raster Layers	
21	Raster Copy	
22	Raster Clip	
23	ArcGIS/WMS Url	
24	ArcGIS/WMS Name	
25	ArcGIS/WMS Layers	
26	ArcGIS Coordsys/WMS ScsCode	
27	WMS OGC Version	
28	ArcGIS/WMS Parameters	
29	Google Map Type	hybrid
30	Google API Key	ABQIAAAA_i0Y9Kyb91O9-vADrHN23RQ35193q6hswAoxjsO3gg7mr
31	Google Layer Name	My Google Maps Layer Name
32	Reproject	TRUE
33	Additional Parameters	
34		
35	debug	yes
36	commandline	

Click 'IAExport' and run the batch publisher like normal. This will fill the cell B36 with a string of text that represents the command line that the Data Manager is sending to the batch publisher (Figure 157). You will want to run this in an external DOS window so any error messages can be viewed, resolved or if necessary forwarded to your support provider.

Figure 157

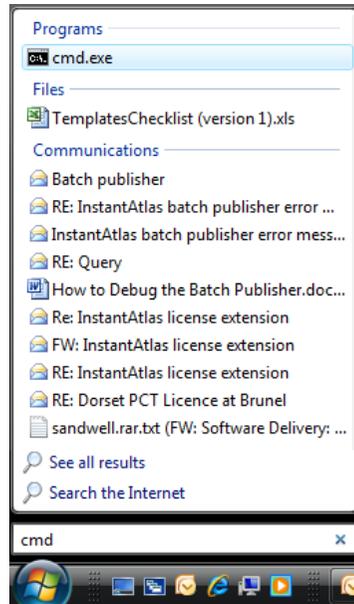
35	debug	yes
36	commandline	"C:\Program Files\GeoWise\InstantAtlas\iapcmd.exe" -d "C:\test\reports\

Select this cell (B36), and copy the text to the clipboard ('Ctrl' + 'c').

Now access a command prompt. In Windows Vista, click the Vista button and in the search box type 'cmd' and hit Enter (Figure 158). Alternatively, select cmd.exe from the results pane.



Figure 158



In Windows XP open the Start menu, click on 'Run' (Figure 159) then type 'cmd' into the 'open' text box and click 'OK' (Figure 160).

Figure 159

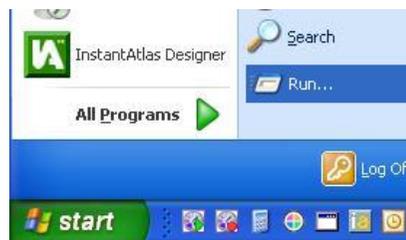
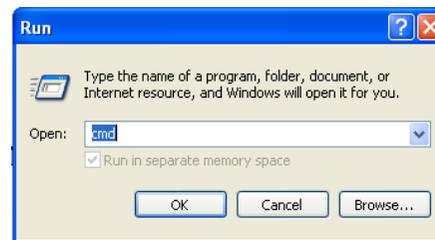


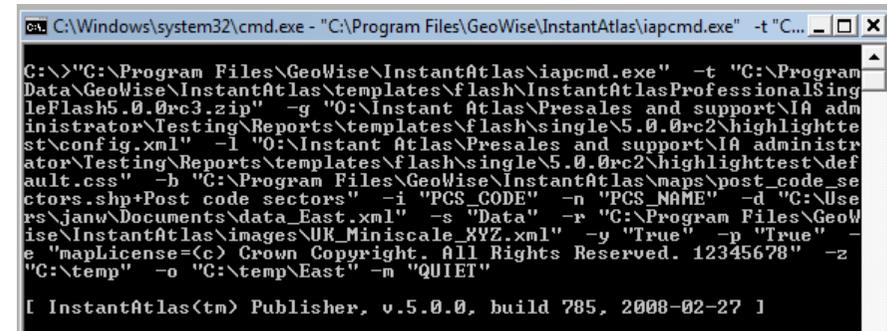
Figure 160



Click 'OK'. This will open a DOS Prompt box.

Paste the command line by right clicking and selecting paste. Hit enter to execute (Figure 161).

Figure 161



The error message will now stay in the DOS prompt screen. You can read this error message and use it to debug the batch publisher, or if required, copy the message to your support provider. To do this, right click on the window, select all, and then copy and paste the error message into an e-mail. Send the error message, along with any comments you may have, to your support provider.



## G. GOOGLE MAPS IN INSTANTATLAS REPORTS

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- G.2. Adding Google Maps as a Background Layer ..... 134
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- G.4. Troubleshooting Hints ..... 137



## G.1. About this Section

This section describes how to set up your InstantAtlas dynamic report to show Google Maps as a background layer. It is assumed that you have read section B. The InstantAtlas Desktop Publisher prior to reading this section.

To use Google Maps in a report on a web server, you will need an API (Application Programming Interface) Key from Google which is specific to the web domain. For local use you do not need an API key.



As of February 2012 Google stopped issuing new keys for the Flash Maps API. This means Google maps will be unavailable for use as a background layer for those users who do not already have an API key. GeoWise are investigating alternative APIs and hope to make Google mapping available again in a future version. In the meantime you should use alternative sources of background mapping. Please talk to the support team if you require further advice.

For users who already have an API key but want to move their report to a new website Google will potentially provide you with a new key. Details can be found on this forum entry:

[http://groups.google.com/group/google-maps-api-for-flash/browse\\_thread/thread/80743abcb597fe80](http://groups.google.com/group/google-maps-api-for-flash/browse_thread/thread/80743abcb597fe80)

When using an HTML template you will not need to enter an API key. However there may be some benefits from using an API key such as allowing you to monitor the Maps API usage in your dynamic report. Please see the following link for further details:

[https://developers.google.com/maps/documentation/javascript/tutorial#api\\_key](https://developers.google.com/maps/documentation/javascript/tutorial#api_key)



GeoWise is not able to offer advice on copyright issues or the legality of presenting your own data over a Google Maps background. Your API key is for your organisation and is not related to GeoWise in any way.

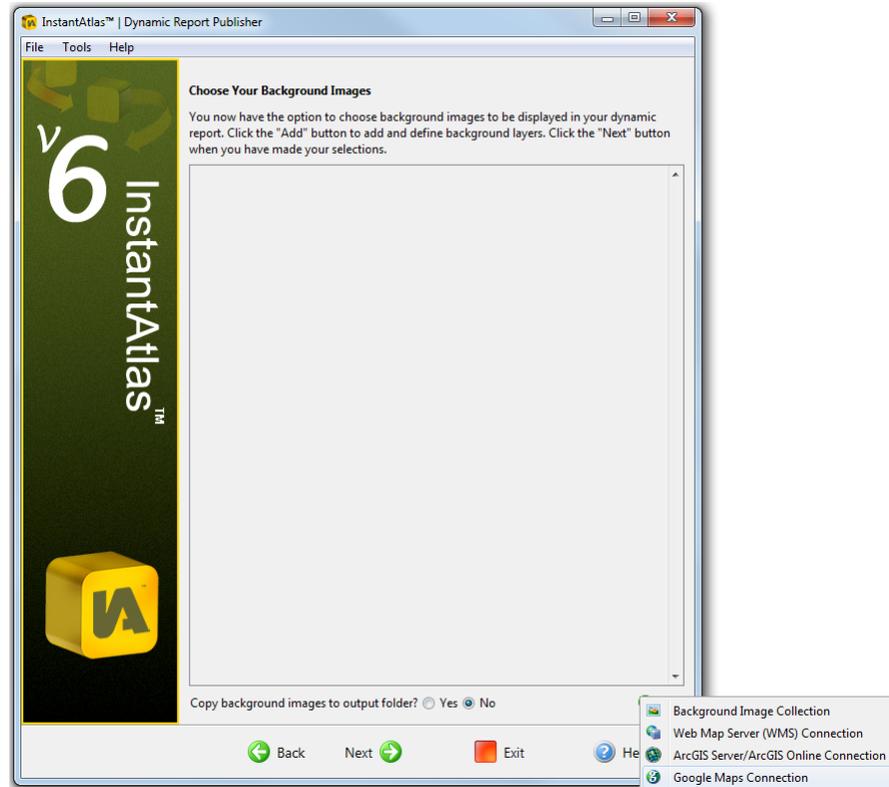
Section 'G.4. Troubleshooting Hints' gives useful trouble shooting tips and solution if needed.

## G.2. Adding Google Maps as a Background Layer

When publishing a dynamic report the InstantAtlas Publisher will give the option to add background layers to the map(s) of you report. One source from where you can get background images from is Google Maps (Figure 162).



Figure 162



Once you have added the Google Maps Layer, you will be prompted to enter an API Key. Please read the [note](#) in the previous section. For local use you do not need an API key, simply type any character into the API Key field.

Select from the 'Map Type' drop down list the Google Maps layer you wish to see by default when you open your report or toggle on the background layer. The end-user will be able to change the Google Maps layer they see through a drop down list in the map (Figure 163).

Figure 163



The Publisher will automatically re-project all base and contextual layers you have uploaded for your report into the geographic coordinate system 'WGS 1984 Web Mercator (Auxiliary Sphere)' to match the Google Maps projection.

**⚠ It is vital that you consider the following points:**

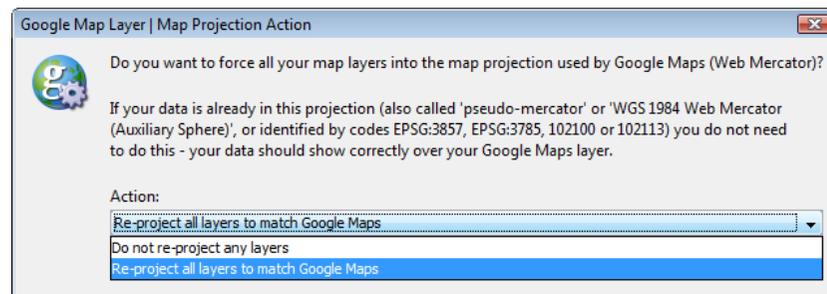
- This re-projection only works if the Publisher knows the coordinate system of your map files. If you are using ESRI shapefiles that include a .prj file, the Publisher can pick up the coordinate system information out of this file. If your shapefile does not have a .prj file or if you are working with MapInfo MID/MIF or TAB files, you will need to select the appropriate coordinate system from the Layer Properties in the 'Coord System' tab. Alternatively you can re-project these map layers before using them in InstantAtlas.



- The re-projection will only work if your map file(s) are in one of the following supported coordinate systems:
  - Un-projected coordinate systems (e.g. latitude/longitude)
  - Coordinate systems that use a Transverse Mercator projection (e.g. British National Grid, UTM zones)
  - Global coordinate systems using a Mercator projection.
  - Lambert Conformal Conic projection

If your map layers are already in the correct projection, click on the 'Advanced' button and select the option 'Do not re-project any layers' in the drop down list (Figure 164).

Figure 164



### G.3. Known Issues When Using Google Maps



There are a number of issues you should consider when using Google Maps background mapping:

1. When your report loads, the map will be adjusted to one of 18 Google Maps zoom levels. This means that your base geography may not fill the map area in the same way as it would if you were not using Google Maps background mapping. To adjust the amount of Google Maps background shown around the Base Geography, you can change the size of the Map component using the Designer.
2. Animated map zooms are not supported for the reason given above
3. World maps will not work when Antarctica is included. In the Web Mercator projection the north and south poles cannot be projected. For this reason reports published with a world map where Antarctica is included will malfunction when using Google Maps.
4. In Flash dynamic reports, exporting the full report or just the Map component will not work when the report is located on a web server. It works correctly from a local or share drive.
5. In Flash dynamic reports, printing the full report or just the Map component with the 'Rescale to fit page' option will not work when the report is located on a web server. It works correctly from a local or share drive.
6. In Flash dynamic reports, printing the full report or just the Map component with the 'Resize to fit page' option will cause the map layer(s) to print with an offset to the Google maps background. This becomes more apparent when the printer has to resize the report, e.g. printing the report in portrait layout will produce a bigger offset between the map layer(s) and Google Maps than printing the report in landscape. When using the 'Hybrid' mode of Google Maps, only the 'Street Map' elements (lines and labels for roads etc.) will be printed.



## G.4. Troubleshooting Hints

The following hints might help you to find a solution, when you cannot get Google Maps to work correctly in your report:

3. **Google Maps appear but your other map layer(s) are not in the right location** (they might appear somewhere near the west coast of Africa) (Figure 165).

Figure 165



The reason for this is that the re-projection was not successful. Please check:

- that you are using ESRI shapefiles for all your base and contextual layers. The re-projection will not work for MapInfo MID/MIF or TAB files. You will need to re-project MapInfo files outside of InstantAtlas into 'WGS 1984 Web Mercator (Auxiliary Sphere)' before you can use them together with Google Maps in InstantAtlas.
- that you have a correct .prj file for each shapefile you use. This file describes the projection of the shapefile. The information in the .prj file has to match the projection the shapefile is actually in.



It is not enough to take any .prj file and rename it to match the shapefile name!

You can however, copy a .prj file from another shapefile and rename it accordingly when you are sure that both shapefiles are in the same projection.

If you do not have a .prj file, one way to create one is to load the shapefile into ESRI ArcMap and export it again. During the exporting process a .prj file gets created.

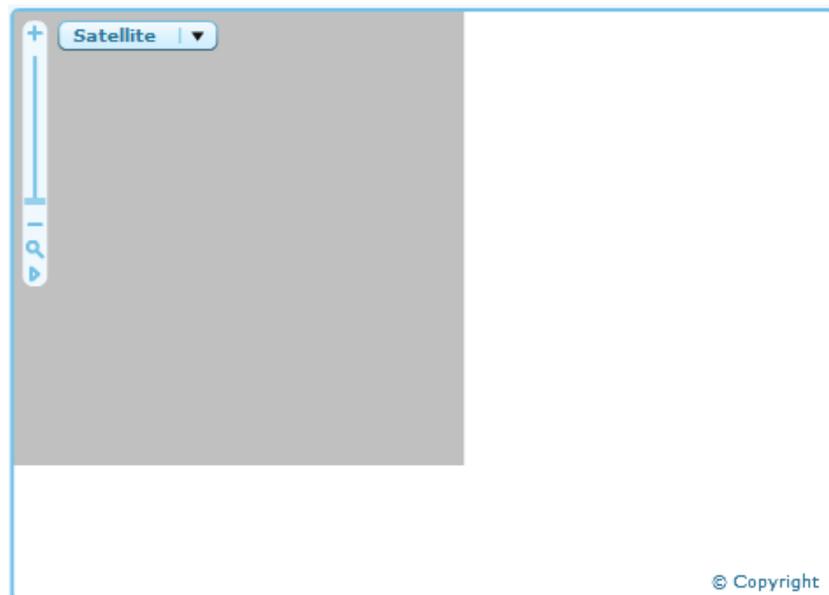
- that your shapefile is in one of the supported projections:
  - Un-projected coordinate systems (e.g. latitude/longitude)
  - Coordinate systems that use a Transverse Mercator projection (e.g. British National Grid, UTM zones)
  - Global coordinate systems using a Mercator projection

Shapefiles in other projections cannot be re-projected by the InstantAtlas Publisher. You will need to re-project them outside of InstantAtlas first (e.g. using ESRI ArcGIS) before you can use them together with Google Maps in a dynamic report.

- that the 'Re-project all layers to match Google Maps' option is selected in the Publisher when you click the 'Advanced' button of the Google Maps background layer.

#### 4. In Flash reports: The map stays empty except for a grey rectangle (Figure 166)

Figure 166



The reason for this is most likely a Flash Player Security issue that can occur when viewing the report on a local or shared drive. To solve it please do the following:

- Hold your mouse pointer over the report and right click until the Flash plug-in menu appears.
- Click 'Global Settings...'. Depending on your Flash Player version one of the following two steps will apply:
  - a) If a pop-up dialog appears, click on the 'Advanced' tab. You may then need to scroll down a bit to find the 'Trusted Location Settings...' button. Click on it to open another dialog. Then click the 'Add...' button.
  - b) If a new browser window opens, click the 'Global Security Settings panel' link in the menu on the left. After a brief delay, the Global Security Settings panel will appear in the browser. Activate the 'Always allow' option. From the 'Edit locations' drop down list select 'Add location'.
- Click 'Add Folder...', browse to the drive (or folder) where your report is saved and click 'OK'. The location will be added to the list of trusted locations.
- Close the browser or the dialog windows with the Flash Player settings and restart your InstantAtlas report.

If this doesn't solve the issue, open the Flash Player settings again and check that the drive or folder really was added to the trusted

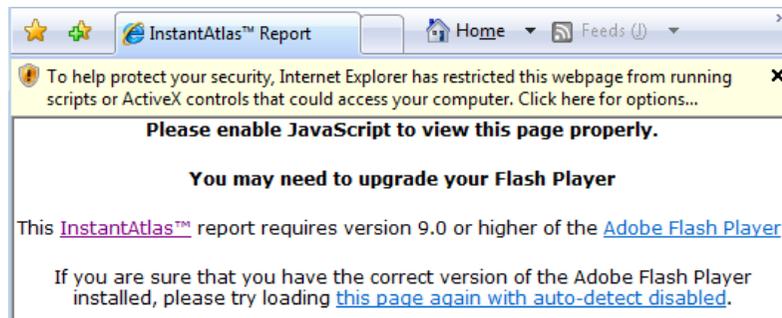


locations. Sometimes these settings do not get saved properly and the steps need to be repeated.

Please note that this issue does not usually affect reports published on the Internet.

5. **In Flash reports: The report does not load at all. You get a message like shown below**

Figure 167



There are a few likely reasons for this error:

- You do not have Adobe Flash Player Version 9 or higher on your computer. You can download the latest version here: <http://get.adobe.com/flashplayer/>
- If a popup blocker bar has appeared at the top of your browser you need to click this and allow active content (it is possible to edit your browser settings to turn this bar off)
- Ensure your browser security settings allow active content

- You may need to add the location you are running the report from to your Flash Player trusted sites. Please see the steps in the previous section on how to do this.



## H. MULTIPLE GEOGRAPHY REPORTS

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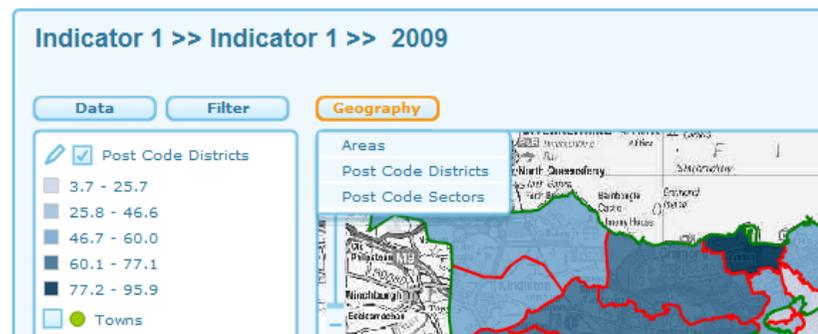
## H.1. About this Section

This section describes how to publish and populate a multiple geography InstantAtlas dynamic report. It is assumed that the reader has prior knowledge of how to use the InstantAtlas Publisher and how to create data files with the Excel Data Manager. If you need information on these topics please refer to section 'B. The InstantAtlas Desktop Publisher' and section 'E. The InstantAtlas Excel Data Manager'.

As of InstantAtlas version 6.1 it is possible to publish InstantAtlas reports that thematically map data for multiple base geographies. It is possible to view data for the different base geographies without having to reload the whole dynamic report.

The Single Map, Double Map, Area Profile, Election Results and Bubble Plot templates allow you to have up to ten different base geographies. However, you can only display one at a time and you switch between them using a 'Geography' drop down menu (Figure 168).

Figure 168

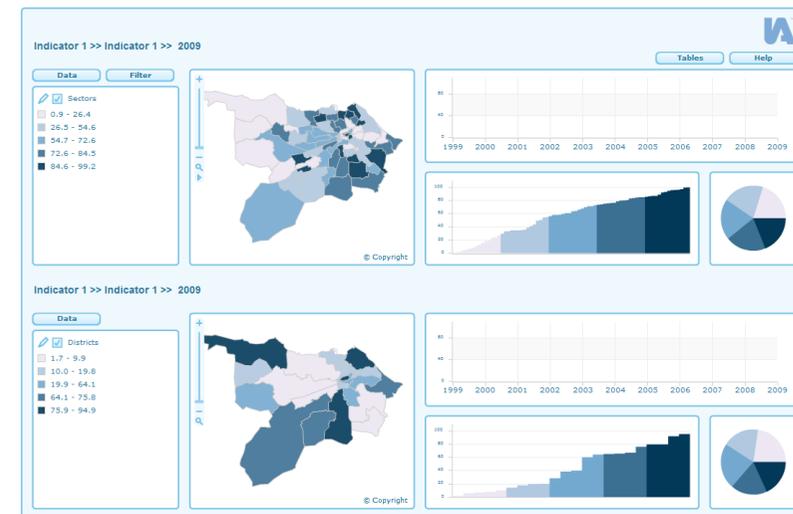


The HTML templates allowing up to 10 different base geographies are: Single Map, Population Pyramid, Double Map, Area Profile, Election Results, Scatter Plot and Advanced Bubble Plot.

The Double Map Time Series template allows you to have two different base geographies in the two maps (

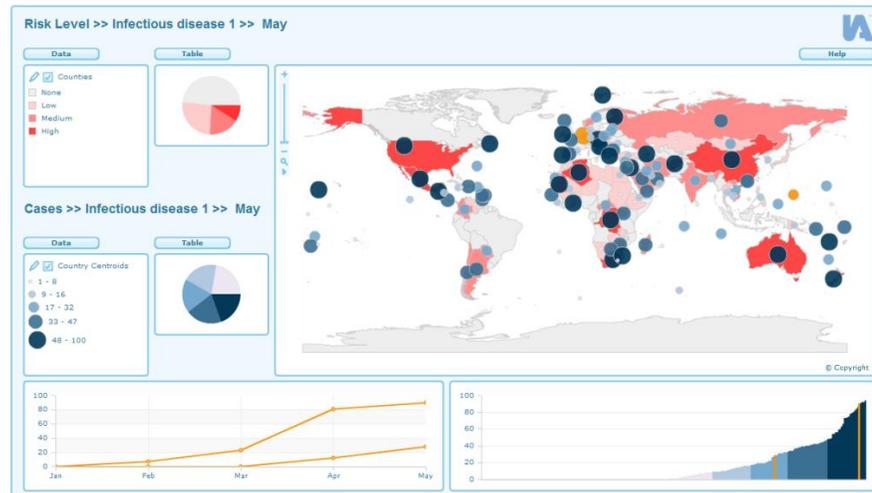
Figure 169), or the same geography in both maps.

Figure 169



The Double Base Layer Template is a variant of the Double Map Time Series Template and allows you to see two base geographies together in one map (Figure 170).

Figure 170

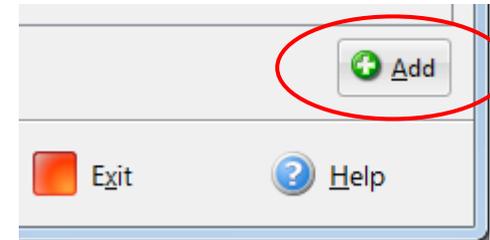


 Note that currently if showing multiple geographies in a report, these must overlap (i.e. have approximately the same geographic extent). For example, publishing a report to show regions and districts in England is acceptable. Publishing a report to show regions in England and regions in France is not (as these geographies do not overlap).

## H.2. Publishing a Multiple Geography Report

Start the InstantAtlas Publisher. On the 'Choose a Template' screen choose one of the templates mentioned above. Click 'Next'. On the 'Choose Your Base Geography' screen browse to the digital map file which you would like to see as your first base geography. This is the geography that will be displayed on opening the report. Then click the 'Add' Button in the bottom right corner of the screen (Figure 171).

Figure 171



A section to choose an additional base geography will appear. For all templates except the Double Map Time Series and the Double Base Layer templates you can add up to 10 base geographies. Make sure that you add them vertically in the same order as you would like them to appear in the 'Geography' menu of your report. Figure 172 shows an example with three different base geographies. Make sure that geographic feature codes are unique across all of the base geographies included.

Figure 172



For the Double Map Time Series template two base geographies is the maximum. The upper geography will show in the top map and the lower geography will show in the bottom map.

For the Double Base Layer template you can also only add a maximum of two base geographies. If you are wanting to map points over polygons please ensure you are adding the polygon layer first and the point layer second as otherwise the points will be hidden behind the polygons in the final map.

Once you have added the base geography layers you want to use in your report, click 'Next'. If you have already created a data XML file then you can upload it on the 'Choose your data' screen (creation of this file is described below). Alternatively, select the option to 'Create a demo data file' and click 'Next'. Then follow the Publisher wizard through the remaining steps of the publishing process. Note that any contextual geographies and background mapping layers you choose will be available for all the base geographies you have included – they are not base geography specific.

### H.3. Creating the Data Files

This section describes the process for generating data files for a multiple geography report. We recommend that you manage the indicator data for each base geography in a separate Excel workbook. You will then export the data from each workbook separately and merge. You can have the same or different data sets for each geography. If you have the same data sets then the data selection will be preserved when you change geography, if you do not have the same data set then there will be a mismatch between which data is selected when you change geography.



 Note that the geography names given in cell B2 of the Geography and Filters worksheet must be unique, e.g. each base geography needs a unique name.

 If the areas in your geographies nest, you may wish include filters that reflect this nesting. In this way, geographies lower in the hierarchy can be filtered according to which area in a higher geography they nest within. For example in a report with Edinburgh post code districts and post code sectors it makes sense to include a Districts filter in the post code sectors workbook. A filter that is available at multiple geographies will stay applied as you switch between these geographies.

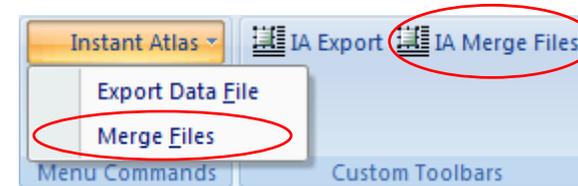
 If you want the map palettes to vary based on the visible base geography and its associated data, please see section 'E.6.2.3. Setting Custom Legends' in the Excel Data Manager area above, or section 3.8.2 of the Access Data Manager User Guide.

In the normal way, export a data file from each workbook separately. It is imperative that the data files for the geographies are named in a way that matches their order on the 'Choose Your Base Geography' screen of the Publisher. We recommend you name them 'data1.xml', 'data2.xml', 'data3.xml',... where 'data1.xml' is the XML file for the uppermost geography, 'data2.xml' is for the next one down and so on.

If you are publishing a report using an HTML template, you need to export the data files into JSON format and chose respective naming ('data1.js', 'data2.js', 'data3.js',...).

The next step is to merge these files into a single data.xml / data.js file. The Excel Data Manager add-in provides an 'IA Merge Files' button for this (Figure 173).

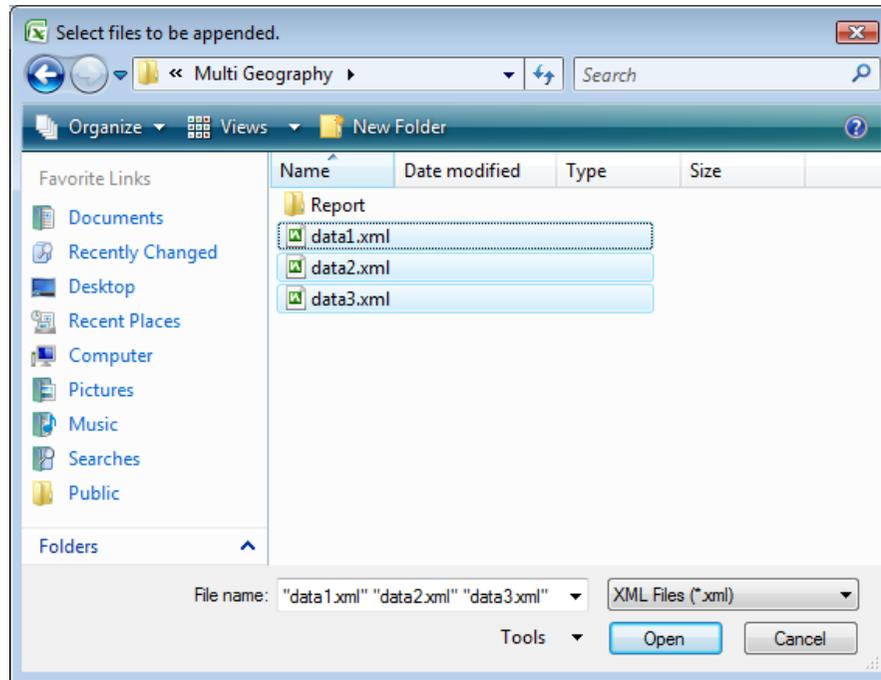
Figure 173



Click this button. The 'Select files to be appended' dialog allows you to browse to the folder containing your data files. Select the files by clicking and holding down the 'Shift' or 'Ctrl' keys on your keyboard. Then click 'Open' (Figure 174).



Figure 174



The files will be appended in the order they are named (alphanumeric) and, as mentioned above, this must match the order of the geographies on the 'Choose Your Base Geography' screen of the Publisher.

The Excel Data Manager will ask you to save the merged data.xml / data.js file. Browse to the folder containing your report and overwrite the existing data.xml / data.js file. Start the report (double click the atlas.html file) to view the result.



# I. THE INSTANTATLAS AREA PROFILE TEMPLATE

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## I.1. About this Section

This section describes the use of the InstantAtlas Area Profile template from version 6.3 onwards. This template is very flexible and is therefore deserving of a dedicated section in this user guide. It is assumed that you have already read section 'B. The InstantAtlas Desktop Publisher', section 'C. The InstantAtlas Designer' and section 'E. The InstantAtlas Excel Data Manager'.

When publishing using this template the 'Choose Settings For Your Dynamic Report' of the Publisher offers different configuration options. You should choose the one that suits the style of presentation you wish to create. These configuration options are described in the following sections.

 As a default setting two of the three Area Profile configurations use associate columns to fill the main chart. Also you will need specific settings in the data file when populating a Performance Results report. For these reasons it is not recommended to choose the 'Create data file from digital map data' option in the 'Choose Your Data' screen in the Publisher. This functionality is limited to the creation of basic data files which will in most cases not be suitable for this advanced template.

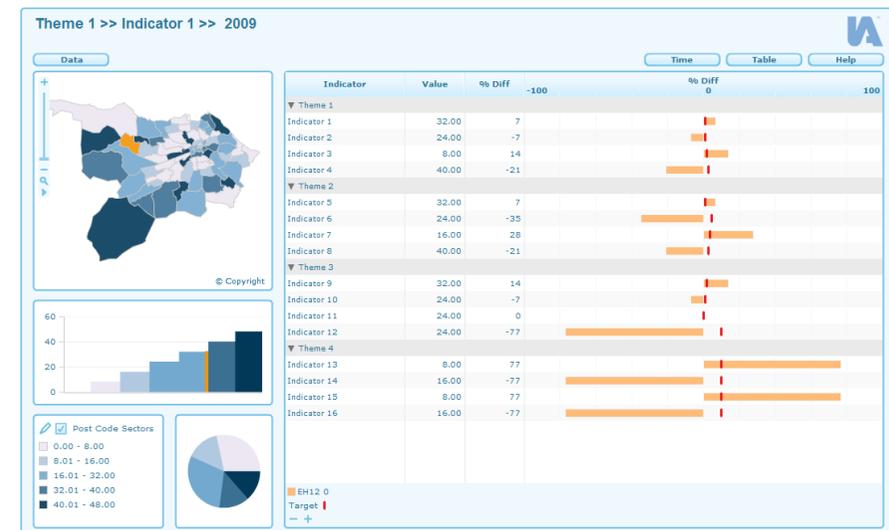
## I.2. Area Profile – Spine Chart

### I.2.1. Configuration

With this configuration the main chart is configured to be a spine chart. This has a central spine and horizontal bars to either side of this that show

whether indicator values for the selected area(s) are above/below a given comparator. If you publish this with a demonstration data file the report will look like that in Figure 175.

Figure 175



You can alter this configuration once you have published a report by opening the config.xml file using the Designer. There are many properties for the spine chart that can be changed to further tailor the appearance/functionality. You can move your mouse pointer over property names in the Designer to see a description. If you are not sure what a particular property is used for please contact the GeoWise Support team using the details in the final section of this guide.

It is possible to show a variable number of columns in the spine chart and each one can be configured separately. The properties that can be set for each column are described below:



**Alias** – the heading displayed for the column.

**Width** – this will be the width of the column as a percentage of the whole chart.

**Name** – this will define the data source for the column. If the column should display indicator values (i.e. thematically mapped values) the value should be 'value'. If the column should display associate values, the Name should be the name of the associate exactly as in the XML data file(s) for your dynamic report (e.g. 'diff' or 'baseline').

If you wish to show symbols, stand alone, in a column you will need to define the Name as '`symbol(symbolValue:associate name)`' where associate name refers to the name exactly as in the XML data file(s) for your dynamic report (e.g. 'trend' or 'state'). You can define the actual symbols for the values in the properties section of the Spine Chart Properties.

If you wish to show symbols and text within the same column you will need to define the Name as:

```
symbol(symbolValue:associate name,textValue:value)
```

Note that "associate name" refers to the name exactly as in the XML data file(s) for your dynamic report (e.g. 'trend' or 'state'). The "value" refers to either the indicator value or if you would like it to show the symbol with the text of an associate value you should change "value" to the associate name exactly as in the XML data file(s) for your dynamic report (e.g. 'trend' or 'state').

If you are publishing a report using an HTML template, you can also define the alignment of the symbol using 'symbolAlign:{right, left, centre}', for example:

```
symbol(symbolValue:state,textValue:value,symbolAlign:right)
```

or

```
symbol(symbolValue:trend,symbolAlign:center)
```

By default, the name of a selected map feature will be shown in the legend at the bottom of the spine chart. If you would prefer to see the feature name in a column in the spine chart you will need to add another row to the Data Columns section in the Designer and type into the Name column 'name'. You may then want to disable the property called 'Display Selected Area Legend'.

In the HTML template, by default the name of a selected map feature will be displayed in the separate selected features legend component.

Having multiple time periods for each indicator is optional. If you do have multiple time periods, we recommend you only show the most recent in the spine chart (to avoid ending up with too many rows in the chart). The spine chart is by default set up to only show the latest dates of your data. If you want to change this setting, you can do that by enabling the property called



'Include Dates?'. You might then want to see the time periods displayed in the spine chart. You can either change the column with the Name 'indicatorName' to 'indicatorDateName' to see both the indicator name and the time periods together in one column. Alternatively you can include a column with the Name 'date' to see only the time periods in a column of the spine chart.

By default, the HTML version of the Area Profile template opens up showing the indicators of the selected date. You can change this to display either the most recent date of each indicator (irrespective of the selected date) or all dates. The Spine Chart property for this is called 'Display Indicators For'. You can choose whether or not the time periods should be displayed in brackets behind this indicator names by using the property 'Display Dates in Profile'.

**Target data** (in the Properties section of the Spine Chart Properties) – this will generally be 'target'. If you have an associate called 'target' in the XML data file(s) for your dynamic report the associate values will be used to draw vertical bars denoting the target an area should achieve.

### I.2.2. Data Preparation

An example of how you should prepare your data is provided in the Excel workbook called IAWorkbookAreaProfile\_SpineChart.xls. This is located in the 'workbooks' folder of your InstantAtlas software. The default location for this is:

C:\Program Files\GeoWise\InstantAtlas\workbooks.

The required data structure is shown in the worksheet called 'iadatasheet' and is shown in Figure 176.

Figure 176

		Theme 1								
		Indicator 1								
		notes.htm			notes.htm			notes.htm		
		numeric	diff	target	2002	diff	target	numeric	diff	
5	Codes	Names	2001	diff	target	2002	diff	target	2001	diff
6	EH11	EH1 1	25.10	88	83	8.41	53	58	69.18	86
7	EH12	EH1 2	16.22	52	47	7.01	27	32	63.98	72
8	EH13	EH1 3	19.36	81	76	7.12	29	34	44.99	21
9	EH104	EH10 4	9.66	-10	-15	3.68	-33	-28	34.75	-7
10	EH105	EH10 5	5.18	-52	-57	3.58	-35	-30	21.58	-42
11	EH106	EH10 6	3.23	-70	-75	2.18	-60	-55	7.42	-80
12	EH107	EH10 7	3.36	-69	-74	1.73	-69	-64	2.94	-92
13	EH141	EH14 1	8.86	-17	-22	4.94	-10	-5	46.74	26
14	EH142	EH14 2	11.23	5	0	6.16	12	17	61.20	64
15	EH143	EH14 3	17.78	66	61	8.80	60	65	62.75	68
16	EH144	EH14 4	11.15	4	-1	10.19	85	90	50.99	37
17	EH145	EH14 5	0.00	-100	-105	3.92	-29	-24	9.09	-76
18	EH146	EH14 6								
19	EH147	EH14 7	7.37	-31	-36	3.67	-33	-28	30.50	-18
20	EH151	EH15 1	5.36	-50	-55	1.78	-68	-63	8.72	-77
21	EH152	EH15 2	4.93	-54	-59	3.32	-40	-35	25.53	-31
22	EH153	EH15 3	5.33	-50	-55	2.96	-46	-41	15.28	-59

By default, the horizontal bars in the spine chart are configured to use an associate called 'diff'. Although these values can represent anything you like we recommend that they are the percentage difference between the indicator value for the base geography area and the indicator value for the comparator. The comparator can be anything you like but is typically a national or regional average - it must be the same for all base geography areas.

In the example above (fictional data), the 'diff' values for each indicator are the percentage difference between the Edinburgh post code sectors values and the Scotland value. In this case Scotland would be the comparator. The percentage difference can be calculated in the following way:

$$100 * ((\text{base area indicator value} - \text{comparator value}) / \text{comparator value})$$



This will give you positive difference values where the base area value is higher than the comparator value and negative difference values where the base area value is lower than the comparator value.

The 'target' associate is optional. If you include target values these will be shown as little vertical markers superimposed on the horizontal bars. These will show whether the target for a particular indicator has been reached or not. If you do not include the 'target' associate, these markers will not show.

In addition to 'diff' and 'target' associates you can include any others described in section 'E. The InstantAtlas Excel Data Manager', sub-section 'E.5.2. Entering Associate Values' (e.g. 'll', 'ul' or 'count') or your own custom associates.

## I.3. Performance Results

### I.3.1. Configuration

With this configuration the spine chart works slightly differently. Each indicator value is represented using a horizontal bar that is superimposed upon reversible shaded ranges. Each indicator can operate on a different scale in the bars column. This chart is well suited to displaying performance indicators but can also be applied more widely to other data. If you publish this with a demonstration data file the report will look like that in Figure 177.

Figure 177



Again, you can alter this configuration once you have published a report by opening the config.xml file using the Designer. For example, you might decide to remove the baseline column or to change the symbols that are displayed alongside the indicator values. Please see section '1.2. Area Profile – Spine Chart', sub-section '1.2.1. Configuration' for detailed information.

### I.3.2. Data Preparation

For each indicator you include in your report you should provide the following associates in the XML data file(s):

**target** – target values shown as text in the 'Target' column and as vertical bars in the 'Performance' column of the chart

**baseline** – baseline values shown as text in the ‘Baseline’ column of the chart

**trend** – values shown as symbols in the ‘Trend’ column of the chart

**state** – values shown as symbols in the ‘Value’ column of the chart

The required data structure is shown in the ‘iadasheet’ worksheet of the workbook called IAWorkbookAreaProfile\_Performance.xls. This is also in the ‘workbooks’ folder of your InstantAtlas installation.

Figure 178

Theme 1										
Indicator 1					Indicator 2					
notes.htm					notes.htm					
Codes	Names	numeric	baseline	target	categoric trend	categoric state	numeric	baseline	target	categoric trend
EH11	EH1 1	25.10	27	25 +	A	69.18	19	17	+	
EH12	EH1 2	16.22	13	48 -	B	63.98	48	49	-	
EH13	EH1 3	19.36	15	42 +	C	44.99	45	37	+	
EH104	EH10 4	9.66	15	37 -	A	34.75	16	29	-	
EH105	EH10 5	5.18	25	18 +	B	21.58	47	49	+	
EH106	EH10 6	3.23	15	42 -	C	7.42	3	29	-	
EH107	EH10 7	3.36	48	6 +	A	2.94	22	5	+	
EH141	EH14 1	8.86	17	29 -	B	46.74	28	13	-	
EH142	EH14 2	11.23	23	25 +	C	61.20	39	9	+	
EH143	EH14 3	17.78	27	27 -	A	62.75	40	33	-	
EH144	EH14 4	11.15	42	33 +	B	50.99	30	43	+	
EH145	EH14 5	0.00	14	35 -	C	9.09	1	41	-	
EH146	EH14 6									
EH147	EH14 7	7.37	41	36 -	B	30.50	33	18	-	
EH151	EH15 1	5.36	6	8 +	C	8.72	47	19	+	
EH152	EH15 2	4.93	2	41 -	A	25.53	2	36	-	
EH153	EH15 3	5.33	48	49 +	B	15.28	18	36	+	

For the shaded ranges to display in the ‘Performance’ column you must define break values (that indicate where each range starts and stops). These must be provided in the ‘Metadata’ worksheet of your Excel workbook. Please refer to the ‘Metadata’ worksheet in the example Excel workbook IAWorkbookAreaProfile\_Performance.xls (Figure 179).

Figure 179

ElementType	Element	MetadataElement	Value
Indicator	Indicator 1	breaks	0,6;14,40
Indicator	Indicator 1	breaksFlip	FALSE
Indicator	Indicator 2	breaks	0,21;50;80
Indicator	Indicator 2	breaksFlip	TRUE

Use the ‘breaks’ element to specify break values for each indicator. These must be separated by semicolons and will define the number and size of the ranges shown in the chart. The break values can be different for each indicator but the number of breaks must be the same. If you wish to flip the ranges for a particular indicator, set the ‘breaksFlip’ element to be TRUE.

## I.4. Radar Chart

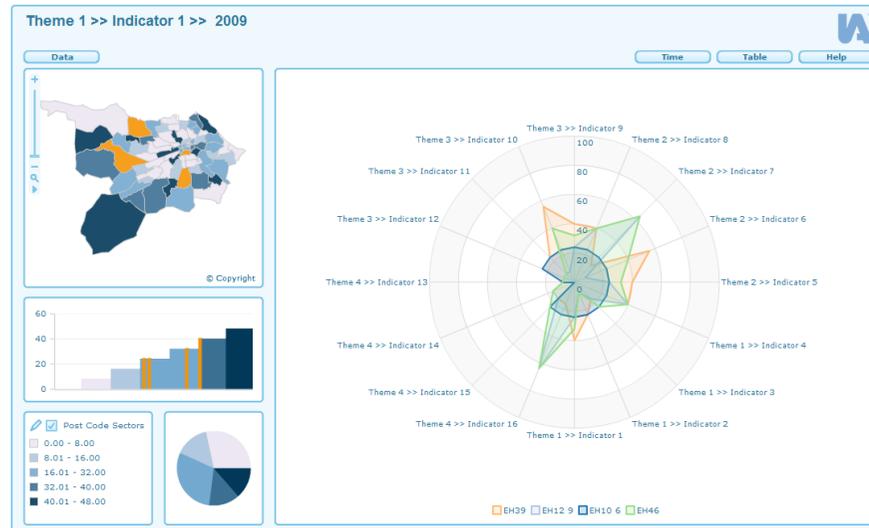
### I.4.1. Configuration

With this configuration, data is displayed in a radar chart that shows all indicators for all themes. The scale is the same for all indicators, with low values plotted near the centre of the radar and high values plotted near the edge. For any particular area, the indicator values are joined by a continuous line. The shape created by this line allows you to visualise how an area scores across a range of indicators and how this area compares to others (Figure 180). By default, you can select up to five areas – these are listed in a key below the radar chart.



The Radar Chart configuration is not yet available as an HTML Edition.

Figure 180



As before, you can alter this configuration once you have published a report by opening the config.xml file using the Designer. For example, you might decide to vary the total number of selected areas labelled in the radar chart or change the colours shown in the chart.

### 1.4.2. Data Preparation

Preparation of data for this configuration requires only indicators and their values. By default the radar chart does not display any associate values.

## 1.5. Making the Chart Read Dataplus XML Files

By default, all of the components in your report will read their data from a data.xml file (or a data.xml file with supporting theme files). However, you have the option of making the spine/performance/radar chart read data from a separate set of XML data files – one for each base geography area. The main advantage is to increase the performance (speed) of your report. The report will not need to load all data XML files “up front”. The spine chart data only gets loaded (one area at a time) when you select an area following the initial load. The initial load of the report will therefore be quicker. This performance gain is only likely to be apparent if there are relatively large numbers of areas (e.g. >200) and/or indicators (e.g. >50).

Creating Dataplus data files is currently not possible with the HTML Edition.

If you wish to implement this, you will need to configure the spine/performance/radar chart in your report to read data from dataplus files. Open the config.xml file for the report, open the properties for the chart and ensure that the ‘Use Dataplus files?’ checkbox is ticked.

Then add a split column to the Geography and Filters worksheet of your Excel workbook. The split value for each base geography feature must be the code of the feature (Figure 181).



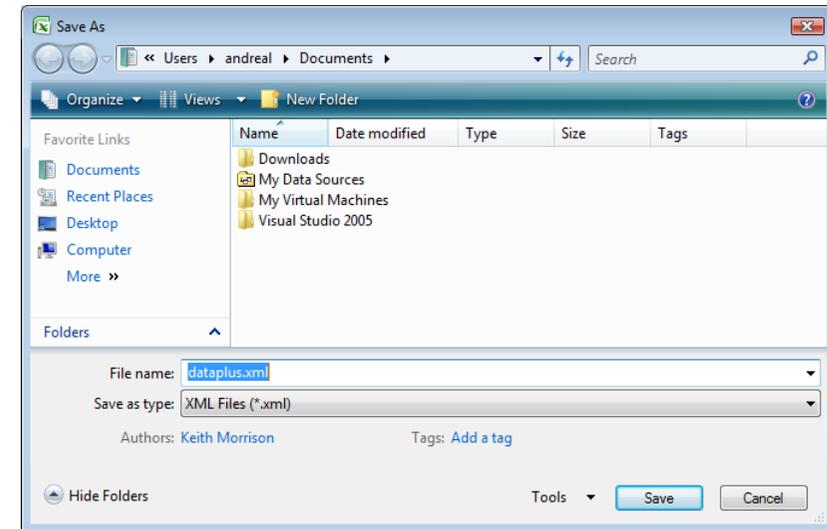
Figure 181

	A	B	C	D
1	<b>polygon</b>			<b>split</b>
2		<b>Post Code Sectors</b>	<b>Link</b>	<b>split</b>
3	EH11	EH1 1	<a href="#">notes.htm</a>	EH11
4	EH12	EH1 2	<a href="#">notes.htm</a>	EH12
5	EH13	EH1 3	<a href="#">notes.htm</a>	EH13
6	EH104	EH10 4	<a href="#">notes.htm</a>	EH104
7	EH105	EH10 5	<a href="#">notes.htm</a>	EH105
8	EH106	EH10 6	<a href="#">notes.htm</a>	EH106
9	EH107	EH10 7	<a href="#">notes.htm</a>	EH107
10	EH141	EH14 1	<a href="#">notes.htm</a>	EH141
11	EH142	EH14 2	<a href="#">notes.htm</a>	EH142
12	EH143	EH14 3	<a href="#">notes.htm</a>	EH143
13	EH144	EH14 4	<a href="#">notes.htm</a>	EH144

If you want to use dataplus files for a report containing comparison geographies, you will need to ensure that dataplus files will be generated by the Data Manager for the comparison geographies. To do this, remove the hash symbol (#) from the beginning of each comparison geography codes in all of the worksheets. In the Geography and Filters worksheet, copy and paste the comparison geography codes from Column A into the split column, Column D.

Use the Excel Data Manager add-in to export the XML data files to the report folder. In the 'Save As' dialog you must change the file name to 'dataplus.xml' (Figure 182).

Figure 182



When you export, the Excel Data Manager will generate a separate dataplus XML file for each area in the base geography. These will be named `dataplus_{feature code}.xml`. Note that only these files need to contain the associates used by the spine chart (e.g. baseline, trend, state, etc). The data.xml (and supporting theme files) that are used by the other components does not necessarily need to include these associates.

## J. THE INSTANTATLAS BUBBLE PLOT TEMPLATE

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## J.1. About this Section

This section describes the use of the InstantAtlas Bubble Plot template. This template is highly flexible and is therefore deserving of a dedicated section in this user guide. It is assumed that you have already read section 'B. The InstantAtlas Desktop Publisher', section 'C. The InstantAtlas Designer' and section 'E. The InstantAtlas Excel Data Manager'.

When publishing using this template the 'Choose Settings For Your Dynamic Report' of the Publisher offers different configuration options. You should choose the one that suits the style of presentation you wish to create.

**Bubble – Advanced:** for plotting up to four indicators simultaneously where the end-user can change each indicator independently.

**Bubble – Simple:** for plotting up to four indicators simultaneously where the end-user can only change a single indicator and those shown in the other dimensions are pre-defined by the administrator.

**Scatter Plot:** for plotting two indicators simultaneously (standard bi-variate scatter plot).

**Funnel Plot:** for plotting two indicators simultaneously with superimposed confidence limits around a regional/national comparator.

These are described in more detail in the follow sections.

The Bubble Plot Family within the HTML templates is comprised of two templates: the Scatter Plot template and the Advanced Bubble Plot template. The table below shows equivalent functionality between the different Flash Bubble Plot configurations and the two HTML templates in the Bubble Plot family:

Flash Bubble Plot configuration	HTML template / configuration with equivalent functionality
Bubble – Advanced	Advanced Bubble Plot template: IA6 Standard configuration
Bubble – Simple	Scatter Plot template: IA6 Standard Bubble Plot configuration
Scatter Plot	Scatter Plot template: IA6 Scatter Plot configuration *
Funnel Plot	Scatter Plot template: IA6 Funnel Plot configuration

\* The data sources for the axis are different between Flash and HTML scatter plot reports – please see section 'J.4 Scatter Plot' for detailed information.

The following sections describing the Flash Bubble Plot configurations also apply to the HTML equivalents unless specifically stated in a green box like this one.

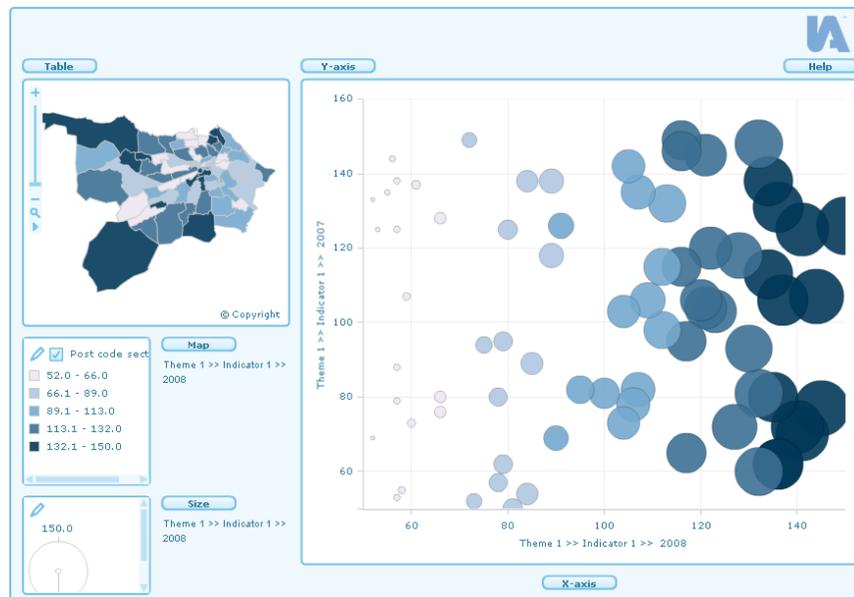


## J.2. Bubble Plot - Advanced

There are two Bubble Plot configurations: Simple and Advanced. These have been named with end-users in mind. The Advanced configuration is so-called because it requires end-users to select up to four separate indicators for the chart (x axis, y axis, bubble size, bubble colour). These indicators can be changed independently by the end-user and you should therefore only choose this configuration if you wish to give them a high level of freedom for data exploration.

If you publish this configuration with a demonstration data file the report will look like that in Figure 183.

Figure 183



There are four buttons for changing data: the indicator shown in the map (this also controls the colour of bubbles in the chart), the indicator shown on the X axis, the indicator shown on the Y axis and the indicator that controls the size of the bubbles.

When using this configuration you may want to define certain minimum and maximum axes values for the bubble plot component. You can define these settings on an indicator or theme basis in the 'Metadata' worksheet of your Excel workbook (or in the table 'tblMetadata' if you are working with the Access Data Manager). The settings are the same that you would use to fix the bar chart and/or time series chart ('minChartValue' and 'maxChartValue'). Please see section 'E.6.2.4. Setting the Chart Axis Minimum and Maximum' for further information.

While this configuration is advanced from the end-user point of view, it is very simple from the point of view of the person creating the report. This is because this configuration does not require any associates to be provided in the data file(s).

Note that if you only want end-users to be able to plot three indicators simultaneously, you can remove the 'Size' button by editing the configuration file (config.xml) of the report using the Designer.

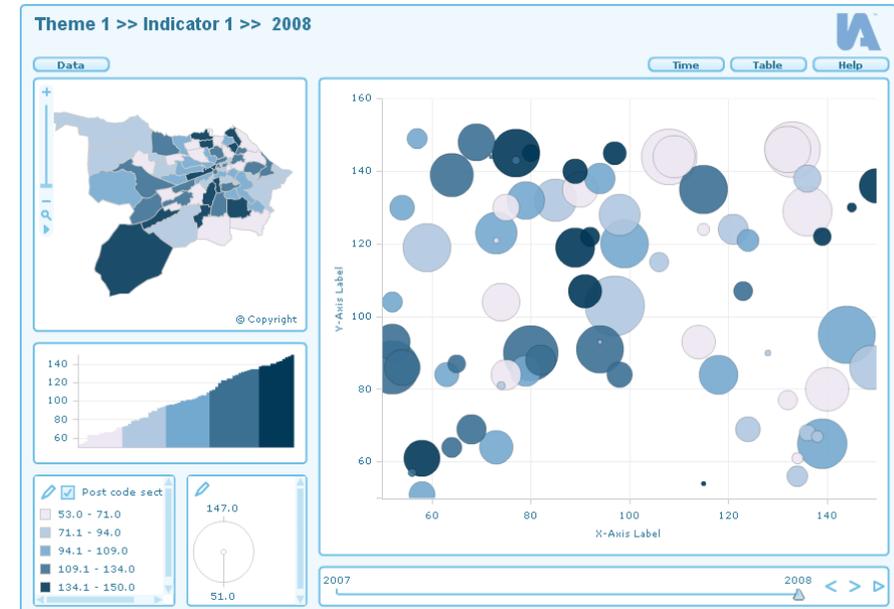
The Advanced Bubble Plot (HTML Edition) template contains two configuration options: IA6 Synchronised Dates and IA6 Standard. Within the IA6 Standard configuration the different Data Explorers are completely independent from each other whereas in the IA6 Synchronised Dates configuration the time periods are synchronised meaning all four variables will always show the same time period. The dates are not included in the Data Explorers but can be accessed through the Time Animation component. This configuration is only sensible if all available indicators contain the same dates.

### J.3. Bubble Plot - Simple

The Simple configuration is so-called because end-users are only required to select a single indicator, the indicator shown in the map. The position and size of bubbles shown in the chart are pre-defined by the administrator and cannot be changed independently. This gives the end-user less freedom but makes the report easier to use.

If you publish this configuration with a demonstration data file the report will look like that in Figure 184.

Figure 184



There is only one 'Data' button for changing the indicator in the map – the bubbles will change position and size automatically.

While this configuration is simple from the end-user point of view, it is more involved from the point of view of the person creating the report. This is because for each indicator you must supply a minimum of two associates in the data file(s):

**xValue** – the X axis values for the bubbles

**yValue** – the Y axis values for the bubbles

You will also have to supply a third associate if you wish the bubbles to have different sizes:



**sizeValue** – the values that will control the radius of the bubbles

These associate names are defined in the configuration file of the report. It is possible to use different associate names by editing the properties of the Bubble Plot component using the Designer. However, as these associate names are not displayed in the report this is usually not necessary.

When using this configuration you may want to define certain minimum and maximum axes values for the bubble plot component. This is done in the Metadata settings of your Data Manager (Excel or Access) and can be defined on an indicator or theme basis. Please see section 'E.6.2. Adding Indicator Display Metadata' for detailed information on how to define metadata settings. The MetadataElement commands required are as follows:

**minChartValueX** – sets the minimum X axis value of the Bubble Plot component

**maxChartValueX** – sets the maximum X axis value of the Bubble Plot component

**minChartValueY** – sets the minimum Y axis value of the Bubble Plot component

**maxChartValueY** – sets the maximum Y axis value of the Bubble Plot component

An example of how you should prepare your data is provided in the Excel workbook called IAWorkbookBubblePlot\_Simple.xls.

This is located in the 'workbooks' folder of your InstantAtlas software. The default location for this is:

C:\Program Files\GeoWise\InstantAtlas\workbooks.

You can see that each indicator date is accompanied by the three associates listed above (Figure 185).

Figure 185

	A	B	C	D	E	F	G	H	I
1			Correctional institutions (%)						
2			notes.htm			notes.htm			
3			numeric	xValue	yValue	sizeValue	numeric	xValue	yValue
4			2000	2001	2002	2003	2004	2005	2006
5	Codes	Names	2000	xValue	yValue	sizeValue	2001	xValue	yValue
6	EH11	EH1 1	23	1180	52	1586	51	1039	
7	EH12	EH1 2	94	940	30	1929	92	873	
8	EH13	EH1 3	36	667	54	2806	22	1073	
9	EH104	EH10 4	35	1118	55	2885	21	1121	
10	EH105	EH10 5	75	605	69	2039	55	694	
11	EH106	EH10 6	76	1073	20	1675	94	1263	
12	EH107	EH10 7	14	576	17	1157	7	772	
13	EH141	EH14 1	27	737	53	2005	14	707	
14	EH142	EH14 2	40	797	28	2043	38	659	
15	EH143	EH14 3	40	544	44	2988	39	1206	
16	EH144	EH14 4	81	1240	63	1524	87	976	
17	EH145	EH14 5	64	570	15	1363	52	1281	
18	EH146	EH14 6	77	545	18	1833	96	855	
19	EH147	EH14 7	80	554	65	2479	66	959	
20	EH151	EH15 1	66	547	35	1900	66	880	
21	EH152	EH15 2	31	596	32	1096	7	1156	

You can specify the labels that will appear on the X and Y axes by using the Designer to open the report's configuration file and editing the properties of the Bubble Plot component.

## J.4. Scatter Plot

With this configuration the chart is a normal bi-variate scatter plot. The points in the chart are all the same size. The colour can be linked to the



legend classes or can be the same for all points. If you publish this with a demonstration data file the report will look like that in Figure 186.

In the HTML templates the colours of the points/bubbles will always be linked to the legend classes.

Figure 186



A report published with the Scatter Plot configuration doesn't require any associates to be included in the data file(s).

The IA6 Scatter Plot configuration of the HTML Scatter Plot template uses associates called 'xValue' and 'yValue' as data sources for the scatter plot axis.

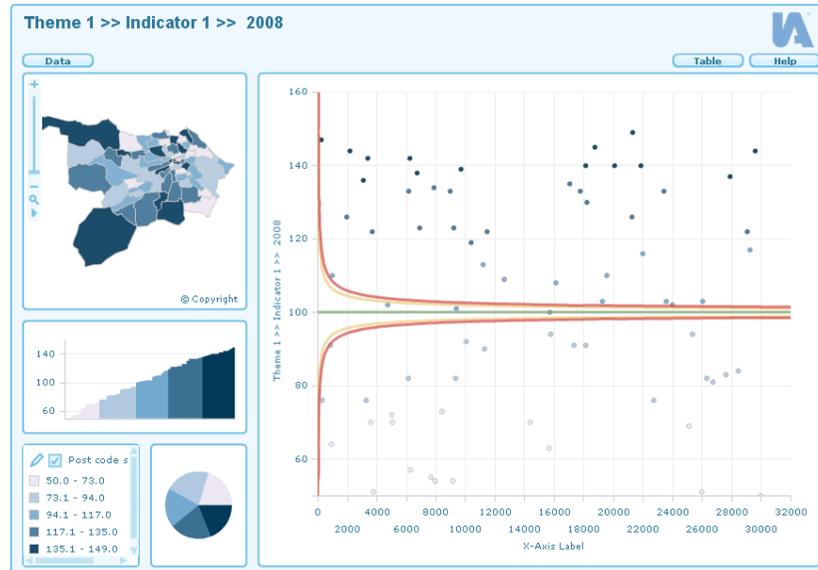
If you wish to give the end-user the ability to select indicators to be used for the scatter plot axis you need to publish a report using the Advanced Bubble Plot template and delete the value of the 'Bubble Size Data' property in the Designer. You can also enable the display of a correlation line in the Bubble Plot properties if you wish.

## J.5. Funnel Plot

Funnel plots are scatter plots upon which confidence limits have been superimposed. These confidence limits are plotted for a regional or national average. The limits enable you to see which observations are significantly different from the regional/national average. The confidence limits form a funnel shape because these decrease as sample/population sizes shown on the X axis increase.

If you publish this with a demonstration data file the report will look like that in Figure 187.

Figure 187



The regional/national average is shown as a horizontal green line across the chart. The yellow and red curves are the upper and lower 95% and 99% confidence limits plotted for the regional/national average. Points that lie above/below the upper/lower curves are significantly different from the regional/national average. Points that lie within the funnel are not significantly different from the regional/national average.

There is only one 'Data' button and this is used by the end-user to change the indicator values in the map. The indicator values shown in the map are also plotted on the Y axis of the chart. The X axis values must be supplied as an associate:

**FUNNELX** – the X axis values for the chart. Typically, these are sample/population sizes. In public health for example, it is common to

show Standardised Mortality Ratios (SMRs) on the Y axis and the expected number of deaths on the X axis.

The required data structure is shown in the 'iadatasheet' worksheet of the workbook called IAworkbookBubblePlot\_FunnelPlot\_Flash.xls. This is also in the 'workbooks' folder of your InstantAtlas installation.

Figure 188

	A	B	C	D	E	F	G	H	I
			Correctional institutions (%)				Nursing homes (%)		
			notes.htm		notes.htm		notes.htm		notes
			numeric	FUNNELX	numeric	FUNNELX	numeric	FUNNELX	numeric
	Codes	Names	2000	FUNNELX	2001	FUNNELX	2000	FUNNELX	2001
6	EH11	EH1 1	23	901	51	901	70	901	95
7	EH12	EH1 2	94	4166	92	4166	6	4166	2
8	EH13	EH1 3	36	577	22	577	54	577	37
9	EH104	EH10 4	35	163	21	163	65	163	69
10	EH105	EH10 5	75	3074	55	3074	24	3074	34
11	EH106	EH10 6	76	1166	94	1166	20	1166	15
12	EH107	EH10 7	14	367	7	367	86	367	71
13	EH141	EH14 1	27	1222	14	1222	52	1222	72
14	EH142	EH14 2	40	4460	38	4460	49	4460	45
15	EH143	EH14 3	40	3015	39	3015	40	3015	68
16	EH144	EH14 4	81	654	87	654	16	654	16
17	EH145	EH14 5	64	36	52	36	36	36	21
18	EH146	EH14 6	77	508	96	508	23	508	16
19	EH147	EH14 7	80	1151	66	1151	20	1151	42
20	EH151	EH15 1	66	689	66	689	22	689	6
21	EH152	EH15 2	31	301	7	301	60	301	74

The IA6 Funnel Plot configuration of the HTML Scatter Plot template uses associates called 'xValue' and 'yValue' as data sources for the funnel plot axis.

A workbook called IAworkbookBubblePlot\_FunnelPlot\_HTML.xls is provided as an example within the 'workbooks' folder of your InstantAtlas installation.



For every indicator, you must also supply values for six properties in the XML data file(s) for your report. In your Excel workbook, you add these into the Metadata worksheet.

The first property defines the average for the region or nation:

**NATIONALAVERAGE** – the regional/national average

The remaining five properties are used to plot the confidence limits:

**LIMITEXPECTED** – an array of the X axis values used to plot the confidence limits. These should be the sample/population size the confidence limits have been calculated for.

**LIMITLOWER95** – an array of the 95% lower confidence limits calculated for the regional/national average based on the sample/population sizes in the **LIMITEXPECTED** array.

**LIMITUPPER95** – an array of the 95% upper confidence limits calculated for the regional/national average based on the sample/population sizes in the **LIMITEXPECTED** array.

**LIMITLOWER99** – an array of the 99% lower confidence limits calculated for the regional/national average based on the sample/population sizes in the **LIMITEXPECTED** array.

**LIMITUPPER99** – an array of the 99% upper confidence limits calculated for the regional/national average based on the sample/population sizes in the **LIMITEXPECTED** array.

The delimiter in the arrays depends whether Excel is using points or commas as decimal separators. If the decimal separator is a point, the delimiter in the arrays must be a comma. If the decimal separator is a comma (e.g. if the regional setting of your operating system is French, Spanish or German) the delimiter in the arrays must be a semi-colon.

Refer to the 'Metadata' worksheet in the Excel workbook called IWorkbookBubblePlot\_FunnelPlot\_Flash.xls.

Figure 189

	A	B	C	D
1	ElementType	Element	MetadataElement	Value
2	Indicator	Correctional institutions (%)	LIMITEXPECTED	30.31,32,33,34,35,36,37,
3	Indicator	Correctional institutions (%)	LIMITLOWER95	37.2,37.49,37.76,38.03,3
4	Indicator	Correctional institutions (%)	LIMITUPPER95	72.8,72.51,72.24,71.97,7
5	Indicator	Correctional institutions (%)	LIMITLOWER99	27.75,28.19,28.62,29.02,
6	Indicator	Correctional institutions (%)	LIMITUPPER99	82.25,81.81,81.38,80.98,
7	Indicator	Correctional institutions (%)	NATIONALAVERAGE	55
8	Indicator	Nursing homes (%)	LIMITEXPECTED	30.31,32,33,34,35,36,37,
9	Indicator	Nursing homes (%)	LIMITLOWER95	17.93,18.21,18.47,18.73,
10	Indicator	Nursing homes (%)	LIMITUPPER95	52.07,51.79,51.53,51.27,
11	Indicator	Nursing homes (%)	LIMITLOWER99	8.88,9.3,9.7,10.09,10.46,
12	Indicator	Nursing homes (%)	LIMITUPPER99	61.12,60.7,60.3,59.91,59
13	Indicator	Nursing homes (%)	NATIONALAVERAGE	35
14	Indicator	Juvenile institutions (%)	LIMITEXPECTED	30.31,32,33,34,35,36,37,
15	Indicator	Juvenile institutions (%)	LIMITLOWER95	-3.1,-3,-2.91,-2.81,-2.73,-
16	Indicator	Juvenile institutions (%)	LIMITUPPER95	9.3,9.2,9.11,9.01,8.93,8.
17	Indicator	Juvenile institutions (%)	LIMITLOWER99	-6.39,-6.24,-6.09,-5.95,-5
18	Indicator	Juvenile institutions (%)	LIMITUPPER99	12.59,12.44,12.29,12.15,
19	Indicator	Juvenile institutions (%)	NATIONALAVERAGE	3.1
20	Indicator	Other (%)	LIMITEXPECTED	30.31,32,33,34,35,36,37,
21	Indicator	Other (%)	LIMITLOWER95	-2.32,-2.18,-2.04,-1.91,-1

An easy way of creating and entering an array is described below. In this example commas are used as delimiters.

Start with a column in a new Excel workbook that contains the numbers for the array. The values 1, 2, 3... displayed in the screenshot below are example values only. In reality, these will be the actual values that you wish to use to plot the confidence limits.



Figure 190

	A	B
1	1	
2	2	
3	3	
4	4	
5	5	
6	6	
7	7	
8	8	
9	9	
10	10	
11	11	
12	12	
13	13	
14	14	
15	15	
16	16	
17	17	
18	18	
19	19	
20	20	

In cell B1 type =A1

In cell B2 type =CONCATENATE(B1,",",A2)

Figure 191

	A	B
1	1	1
2	2	1,2
3	3	
4	4	
5	5	
6	6	
7	7	
8	8	
9	9	
10	10	
11	11	
12	12	
13	13	
14	14	
15	15	
16	16	
17	17	
18	18	
19	19	
20	20	

Copy the formula in cell B2 down until you reach the last value in column A. You can do this by clicking in cell B2 and double clicking the handle to the bottom right of the cell border.

Figure 192

	A	B	C
1	1	1	
2	2	1,2	
3	3		
4	4		

Your worksheet should now similar to that shown below.

Figure 193

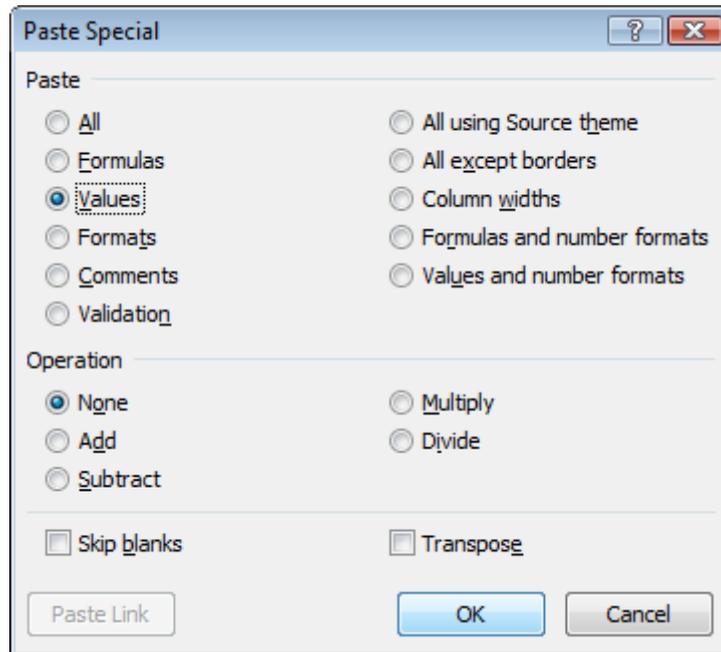
	A	B	C	D	E	F
1	1	1				
2	2	1,2				
3	3	1,2,3				
4	4	1,2,3,4				
5	5	1,2,3,4,5				
6	6	1,2,3,4,5,6				
7	7	1,2,3,4,5,6,7				
8	8	1,2,3,4,5,6,7,8				
9	9	1,2,3,4,5,6,7,8,9				
10	10	1,2,3,4,5,6,7,8,9,10				
11	11	1,2,3,4,5,6,7,8,9,10,11				
12	12	1,2,3,4,5,6,7,8,9,10,11,12				
13	13	1,2,3,4,5,6,7,8,9,10,11,12,13				
14	14	1,2,3,4,5,6,7,8,9,10,11,12,13,14				
15	15	1,2,3,4,5,6,7,8,9,10,11,12,13,14,15				
16	16	1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16				
17	17	1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17				
18	18	1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18				
19	19	1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19				
20	20	1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20				



Copy the value in the bottommost cell in column B into your clipboard.

In the Metadata worksheet of your Excel Data Manager, right click in cell that will contain the array and choose 'Paste Special...'. The dialog shown below will appear.

Figure 194



Click the 'Values' radio button and click 'OK'.

If you need the array delimiter to be a semi-colon rather than a comma your formula in cell B2 will be =CONCATENATE(B1,";",A2)



## K. THE INSTANTATLAS ELECTION TEMPLATE

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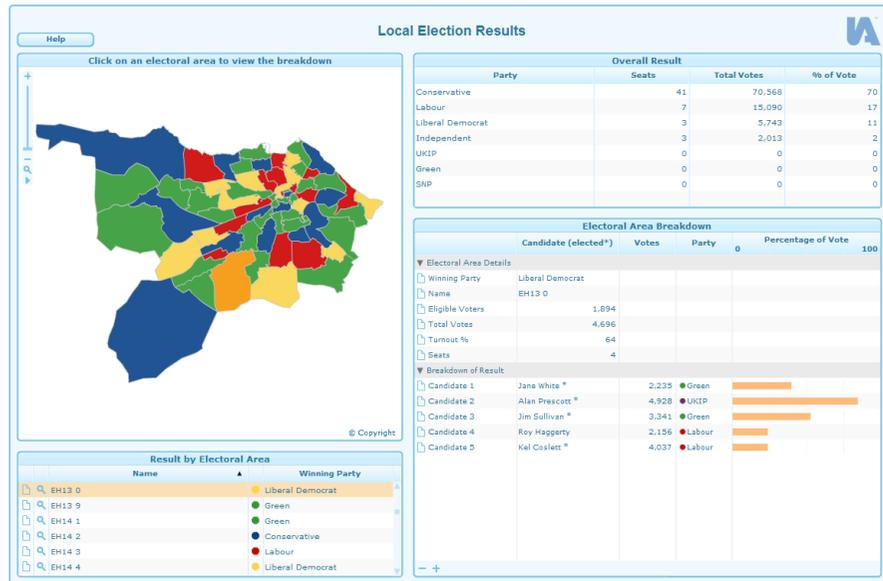
## K.1. About this Section

This section describes how to set up and create reports using the InstantAtlas Election Results template. It is assumed that you have already read section 'B. The InstantAtlas Desktop Publisher', section 'C. The InstantAtlas Designer' and section 'E. The InstantAtlas Excel Data Manager'.

## K.2. The Election Results Template

The Election Results template enables you to map interactively the results of elections based on winning parties. If you publish with the demonstration data file, when the map is clicked, election data appears in three areas, as shown in Figure 183 below.

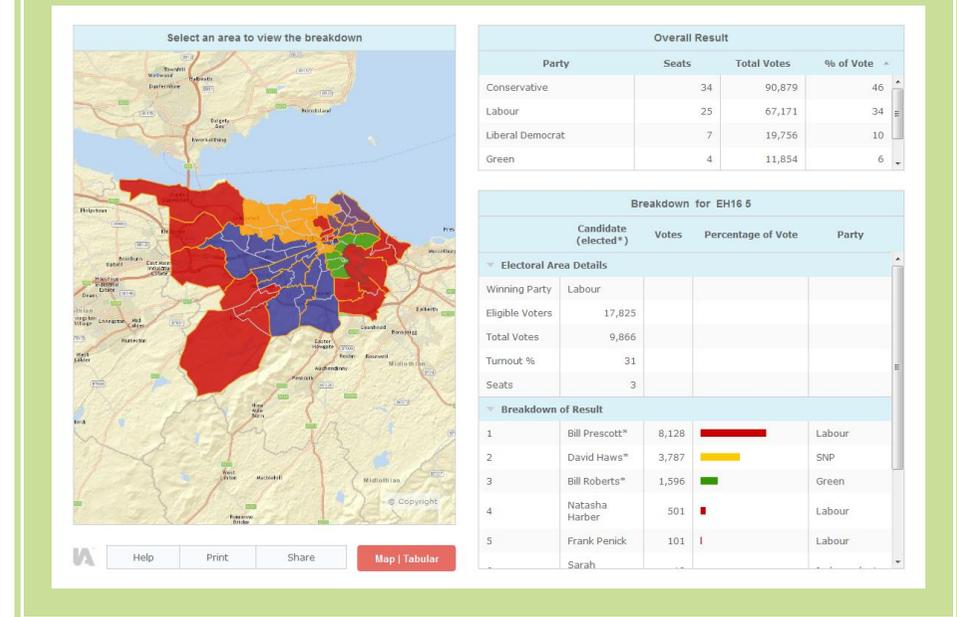
Figure 195



Overall results are contained in the Comparison Table at the upper right of the report, while each area and its winning party are listed in the Table at the bottom left. The Spine Chart on the right contains both electoral area details and breakdowns of election data. End-users click on the map to populate the Spine Chart with data.

The default layout of an Election Results (HTML Edition) template (Figure 196) is very similar to the Flash equivalent with the exception that the Table with results by area can be toggled over the Map using a button.

Figure 196



### K.3. Data Preparation

The required data structure is represented in Figure 197 below, and an example workbook containing fictitious election results has been included in the 'iadasheet' worksheet of the workbook named IaworkbookElectionResults.xls. This file is found in the 'workbooks' subfolder of your installation folder of InstantAtlas.

Figure 197

Electoral Area Details								
Winning Party			Name	Eligible Voters	Total Votes			
notes.htm			notes.htm	notes.htm	notes.htm			
categoric			categoric	numeric	numeric			
Codes	Names		seats	voteCount	votePercent			
EH11	EH1 1	Mix				EH1 1	4856	4972
EH12	EH1 2	Conservative				EH1 2	699	2608
EH13	EH1 3	Labour				EH1 3	768	3559
EH104	EH10 4	Liberal Democrat				EH10 4	3902	641
EH105	EH10 5	Mix				EH10 5	429	3072
EH106	EH10 6	Mix				EH10 6	569	3016
EH107	EH10 7	Conservative				EH10 7	3591	4671
EH141	EH14 1	Labour				EH14 1	3176	2432
EH142	EH14 2	Liberal Democrat				EH14 2	3772	678
EH143	EH14 3	Mix				EH14 3	3279	4418
EH144	EH14 4	Mix				EH14 4	646	493
EH145	EH14 5	Conservative				EH14 5	3068	1145
EH146	EH14 6	Labour				EH14 6	2516	4372

The data in the iadasheet of the example workbook provided is divided into two themes containing a number of indicators and associates. These are discussed below in detail, in reference to the example workbook, to help you create your own election results workbook.

#### K.3.1. Theme 1

This theme (row 1, merged across Column C to K) contains a number of indicators that contain all data except for the breakdown of election results.

It is named 'Electoral Area Details' in the example workbook, as shown in Figure 198 below.

Figure 198

Electoral Area Details								
Winning Party			Name	Eligible Voters	Total Votes			
notes.htm			notes.htm	notes.htm	notes.htm			
categoric			categoric	numeric	numeric			
Codes	Names		seats	voteCount	votePercent			
EH125	EH12 5	Mix				EH12 5		3797
EH126	EH12 6	Conservative				EH12 6		115
EH127	EH12 7	Labour				EH12 7		4068
EH128	EH12 8	Liberal Democrat				EH12 8		3270
EH129	EH12 9	Mix				EH12 9		4375
EH130	EH13 0	Mix				EH13 0		3835
EH139	EH13 9	Conservative				EH13 9		4836
EH951	EH95 1	Labour				EH95 1		4185
EH991	EH99 1	Liberal Democrat				EH99 1		2359
#Conservative	Conservative		41	70568	70			
#Labour	Labour		7	15090	17			
#Liberal Democrats	Liberal Democrat		3	5743	11			
#Independent	Independent		3	2013	2			
#UKIP	UKIP		0	0	0			
#Green	Green		0	0	0			
#SNP	SNP		0	0	0			

#### K.3.1.1. Theme 1, Indicator 1

This indicator (row 2, merged across Column C to F) contains data populating three areas of the report: the 'Winning Party' shown in the first theme of the Spine Chart; the winning parties shown in the Table below the Map; and all of the Comparison Table at the top-right of the report. This indicator is named 'Winning Party' in the example workbook.

The indicator type is designated 'categoric' in cell C4, and associates are assigned in cell D5 as 'seats', in cell E5 as 'voteCount', and in cell F5 as 'votePercent'.



For the 'Winning Party' and 'Name' lines of the first theme of the Spine Chart and all of the data shown in the Table below the Map, displayed values are taken from text entered in Column C. Note that no associate values are displayed for those two areas.

The Comparison Table data is set up slightly differently. Comparison data codes are entered in Column A but preceded with hash symbols, as shown in cells A80-A86 in Figure 198 above. Enter each party name as it will appear in the Comparison Table of the report in Column B, next to its code. Note that no indicator value is given in column C. Instead, the data for the Comparison Table is taken from the associate columns (D to F). Accordingly, the total won seats are given as values in column D, the numbers of votes are given in column E, and the percentages of votes won are given in column F.

### K.3.1.2. Theme 1, Indicators 2-6

Cells G2, H2, I2, J2, and K2 contain indicators 2-6 of Theme 1. These indicators have been assigned as 'Name', 'Eligible Voters', 'Total Votes', 'Turnout %', and 'Seats' in the example workbook. This data is displayed in the first theme of the Spine Chart.

### K.3.2. Theme 2

The second theme is the breakdown of an election. This theme provides the data shown in the second theme of the Spine Chart.

The indicator type is categoric and the value is the name of a candidate. The number of indicators in this theme depends on the maximum number of candidates that stood for an election in the area(s) displayed in the Map.

Stars have been added to winning candidates' names and associate values for 'Votes', 'Party' and 'Percentage of Vote' have been included, as shown in Figure 199 below.

Figure 199

	A	B	L	M	N	O	P
1			<b>Breakdown of Results</b>				
2			<b>Candidate 1</b>				<b>Candidate 2</b>
3			notes.htm				notes.htm
4			categoric		categoric		categoric
5	<b>Codes</b>	<b>Names</b>		<b>votes</b>	<b>party</b>	<b>percentage of vote</b>	
6	EH11	EH1 1	Linda Evans *	3968	Labour	15	Alex Murthy
7	EH12	EH1 2	Bill Brown *	4798	Conservative	77	Phil Veivers *
8	EH13	EH1 3	Paul Loughlin	2980	Labour	87	Neil Holding
9	EH104	EH10 4	Jane White *	3173	Green	86	Alan Prescott *
10	EH105	EH10 5	Linda Evans *	4895	Labour	68	Alex Murthy
11	EH106	EH10 6	Linda Evans *	3593	Labour	63	Alex Murthy
12	EH107	EH10 7	Bill Brown *	4764	Conservative	14	Phil Veivers *
13	EH141	EH14 1	Paul Loughlin	1383	Labour	74	Neil Holding
14	EH142	EH14 2	Jane White *	2446	Green	59	Alan Prescott *
15	EH143	EH14 3	Linda Evans *	887	Labour	63	Alex Murthy
16	EH144	EH14 4	Linda Evans *	336	Labour	15	Alex Murthy
17	EH145	EH14 5	Bill Brown *	2664	Conservative	80	Phil Veivers *
18	EH146	EH14 6	Paul Loughlin	1095	Labour	91	Neil Holding

## K.4. Configuration

The config.xml file of the Election results (Flash Edition) template is very similar to the Area Profile – Spine Chart configuration of the Area Profile template. In fact it would be possible to create the one out of the other by simply deleting some components and changing a few properties.

Election Results reports do not have a data button as it is not intended to change the map to show any other indicators except the Winning Party.



The Map, Table and Spine Chart have been configured to only allow the selection of one single area whereas none of the entries in the Comparison Table can be selected

In the Spine Chart the horizontal bars show the values of the associate 'percentage of vote' using a range between 0 and 100.

The 'Party' column has been defined to show a small circle in the colour of the party together with the party name. The code in the 'Name' column is by default:

```
symbol(symbolValue:party,textValue:party)
```

Please refer to section '1.2. Area Profile – Spine Chart' for information on how to define these symbols in the Spine Chart.

In the Election Results (HTML Edition), instead of showing small circles with the party colours for each candidate in the Spine Chart, the horizontal bars themselves are coloured according to the value of the 'party' associate. The property for this is called 'Use Data For Bar Colour' and its value has to match exactly the name of the party associate. The colours for the parties have to be defined using the Symbol properties of the Spine Chart.

If you do not wish to colour the bars differently according to the party of the candidate, simply delete the value of the 'Use Data For Bar Colour' property. The property 'Bar Colour' will then set the colour for all bars.

In the 'Data Columns' section of the Spine Chart Properties the column labelled 'Percentage of Vote' (which is the column containing the horizontal bars) has 'election' in the 'Name' column. Compared to the column name 'profile' of the IA6 Area Profile – Spine Chart configuration the name 'election' omits the scale labels in the column header.

Additionally to the above differences between the IA6 Area Profile - Spine Chart configuration and the Election Results template there are some Spine Chart properties not included in the Election template as they do not apply considering the require data structure. Therefore it is not possible to create an Election results configuration out of the IA6 Area Profile – Spine Chart configuration like it is the case for the Flash templates.



## L. THE INSTANTATLAS HTML PROFILE TEMPLATE

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## L.1. About this Section

This section describes the use of the InstantAtlas HTML Profile template. This template allows you to create a set of linked HTML pages that provide a clear, accessible view of your data at different levels (theme, indicator, geography feature) without Flash content.

It is assumed that you have already read section 'B. The InstantAtlas Desktop Publisher', section 'D. The InstantAtlas Style Editor' and section 'E. The InstantAtlas Excel Data Manager'.

## L.2. Publishing an HTML Profile Report

### L.2.1. Data Preparation

Before you can publish an HTML Profile report you need to have your data in InstantAtlas XML format (i.e. the same format as used by the Flash templates). You can use either the Excel or Access Data Manager of InstantAtlas to structure and export your data in the same way as for the other templates. Please see section 'E. The InstantAtlas Excel Data Manager' or the Access Data Manager user guide for further information. There are no special associates required. For an example Excel workbook suitable for use in the HTML Profile Template, please refer to the Excel workbook in your Start Menu under 'InstantAtlas Desktop Edition'.



For the report to display your data in tables, it is necessary that you have the same table structure within one theme. In other words all indicators of the same theme need to have the same associates.



Please note that the InstantAtlas Publisher will not create demo data for this template and the data cannot be changed after the publishing process is finished. Also, the 'Create data file from digital map data' option in the 'Choose Your Data' screen in the Publisher cannot be used for this template.

HTML Profile reports can display:

1. Themes
2. Indicators
3. Time Periods
4. Associates
5. Metatext
6. Filters (as grouping options in the area index page)

You must upload your data XML file into the 'Choose Your Data' screen of the Publisher (Figure 200).

Figure 200

**Choose Your Data**

You now have the option to upload a data file for your report. This should be of type "text/xml". If you do not wish to upload a data file at this stage, the InstantAtlas Publisher can create a demonstration data file for you.

Create a demo data file

Use an InstantAtlas™ data.xml file:

C:\demo\data.xml

Create a data file from digital map data "{0}":



## L.2.2. Configuration

All configuration for this template is done during the publishing process on the 'Choose Settings For Your Dynamic Report' screen (Figure 201). After the report is published, it is not possible to change these settings (other than by manually editing HTML).

If you hold your mouse pointer over the property names you will see a description for each property.

Figure 201



Most of the properties are self-explanatory - the less obvious examples are explained below:

### Header File and Footer File

You have the option to include a header and footer for the profile pages. For example you might want to include your website banner as a header.



The file you upload **must** be in XHTML format. This is stricter and cleaner version of HTML – please see the following link for more information:

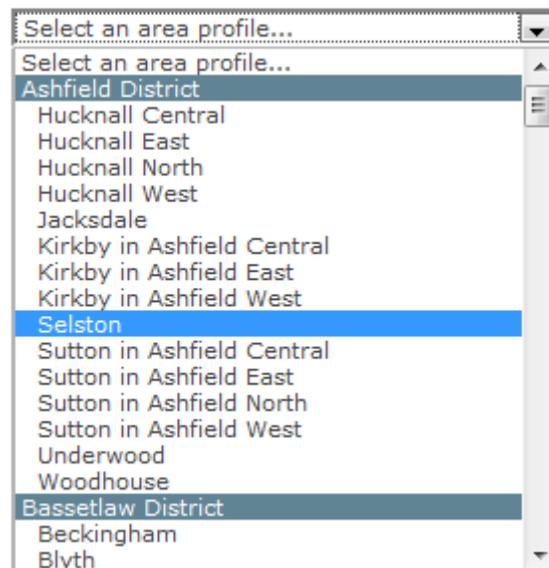
[http://www.w3schools.com/html/html\\_xhtml.asp](http://www.w3schools.com/html/html_xhtml.asp).

Please also note that the header and footer files do not need the usual HTML structure tags <html>, <head> and <body> as those will already be provided by the template. You will need to enclose your XHTML code in a <div>, so that you have one <div> for the header and one <div> for the footer in two different files.

### Include Area Profile Selection?

The profile selector is a drop down list which allows you to switch to the profile page to a different geographic feature (Figure 202).

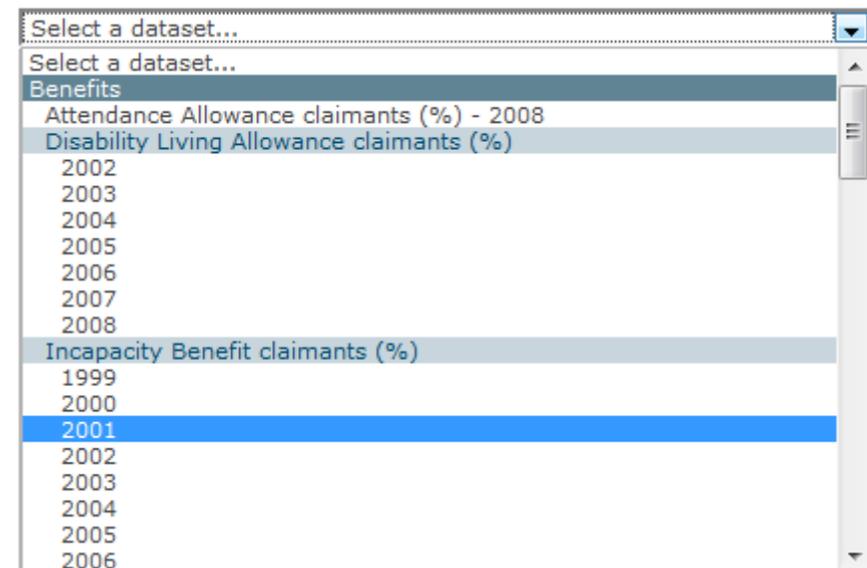
Figure 202



### Include Indicator Selection?

The indicator selector is a drop down list which allows you to view data for a selected theme/indicator/time period for all geographic features (Figure 203).

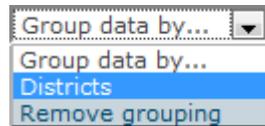
Figure 203



### Include Group Selection?

If your data contains one or more filters you may wish to include the group selector. This is a drop down list in the area index page which allows the end-user to display the list of geographic features grouped by the filter values of the selected filter (Figure 204).

Figure 204



### Include Navigation Bar?

The navigation bar is displayed at the very top of all HTML pages showing the location of the current page in the system of linked HTML pages (Figure 205).

Figure 205

[Home](#) | [Nottinghamshire Wards](#) | [Kirkby in Ashfield Central](#)

### Include Hyperlink To An Atlas?

If you have created a dynamic report as an alternative view to the HTML Profile report you can include a hyperlink into the geographic feature profile pages to open the dynamic report.

### Include Map? and Google Maps Key

You can include a map into the HTML Profile pages showing the geographic feature superimposed on a Google Maps background.

For Google Maps to work on a web server, you will need to provide an API (Application Programming Interface) Key. Please read the [note](#) in section G. Google Maps in InstantAtlas Reports. For use on a local drive you do not need an API key - simply type any character into the API Key field.

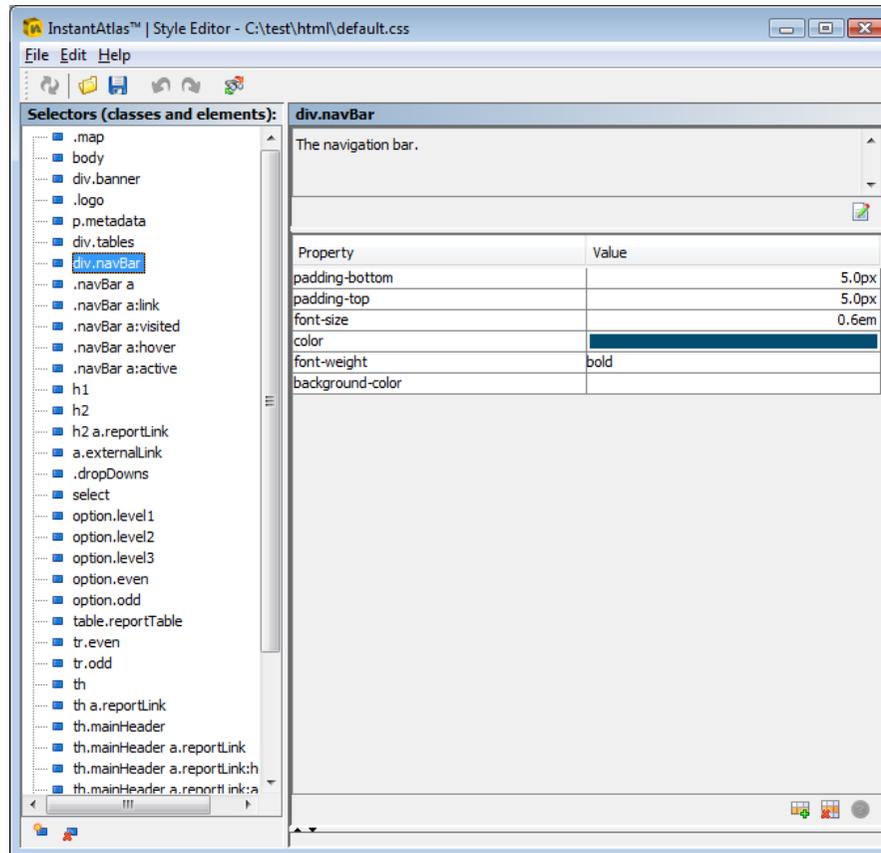
 The Publisher will automatically transform your base layer(s) into latitude/longitude so that Google can re-project it to 'WGS 1984 Web Mercator (Auxiliary Sphere)' to match the Google Maps projection. This transformation only works with ESRI shapefiles. If you are using MapInfo TAB files or MID/MIF files you will need to transform these map layers outside of InstantAtlas. Your shapefiles must have a .prj file. If this file is missing the Publisher will not be able to transform your map layers. Supported coordinate systems are coordinate systems that use a Transverse Mercator projection (e.g. British National Grid, UTM zones) and global coordinate systems using a Mercator projection.

### L.2.3. Editing Styles

The styles for the profile pages are stored in a cascading style sheet called default.css as for InstantAtlas Flash reports. You will find this file in the output folder for the HTML Profile report. You can open this file using the InstantAtlas Style Editor and change styles in the same way as for Flash reports (Figure 206).



Figure 206



## L.3. The Different Pages of an HTML Profile Report

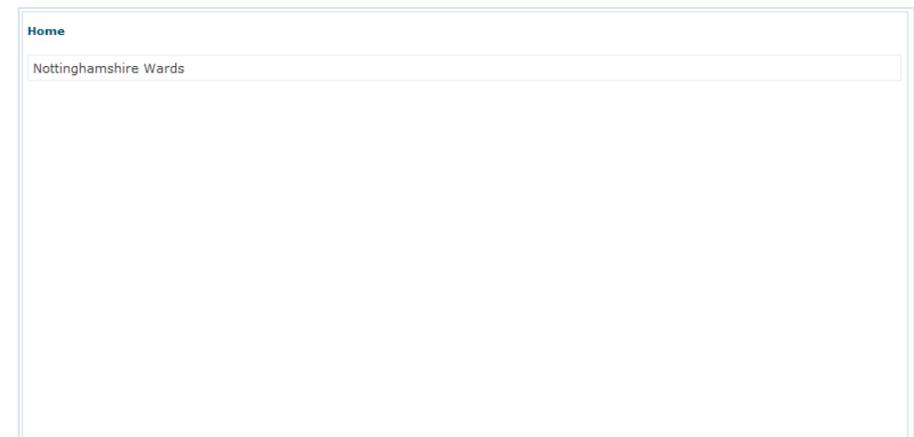
### L.3.1. Home Page

The set of HTML pages that make up a HTML Profile report include a home page which opens when you double click the atlas.html file in the report folder (Figure 207). It displays the name of each base geography feature you have included into your report. Clicking on one of the feature names will open the area index page (Figure 208).



You may decide it is not worth using the home page in which case you can link directly to the area index page or the data index page.

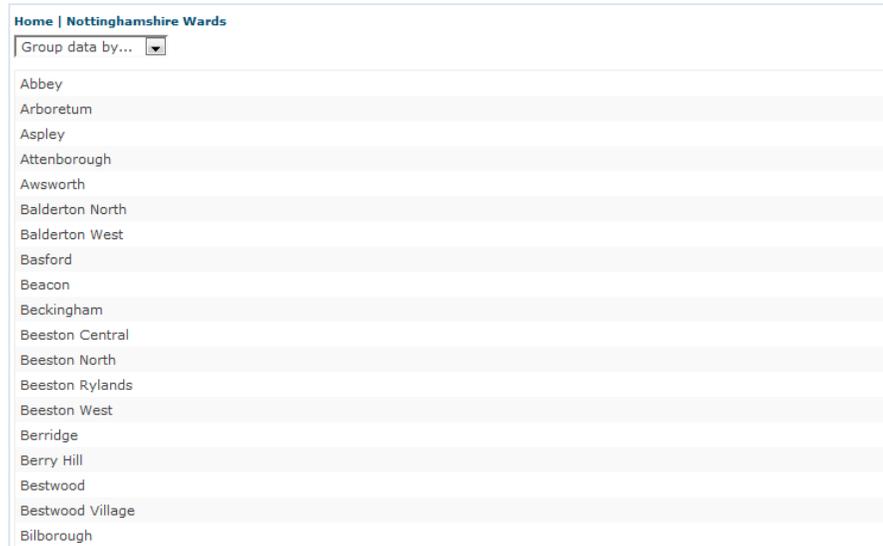
Figure 207



### L.3.2. Area Index Page

The area index page lists all geographic features for the selected base geography (Figure 208).

Figure 208

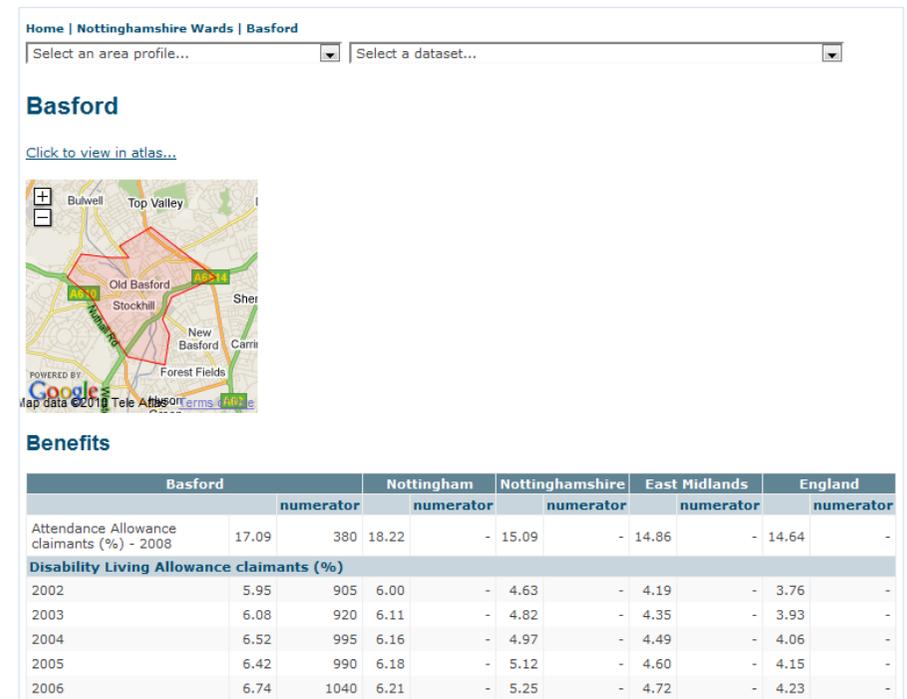


If the group selector is included, the end-user will be able to select a filter out of the drop down list to group the geographic features into the filter values of the selected filter. Clicking on an area name opens the profile page for this geographic feature.

### L.3.3. Profile Page

The profile pages display all data for the selected geographic feature and optionally comparison areas. They can also include a map with the selected feature superimposed over a Google Maps background. If the profile selector and the indicator selector are included, they will show on these pages to allow the user to link to other pages in the report. Also, if a hyperlink to a dynamic report is included, it will appear here (Figure 209).

Figure 209



### L.3.4. Data Index Page

The data index page cannot be accessed via a link from another page. It is created during the publishing process and displays all themes, indicators and time periods for a base geography (Figure 210).

The name of the file is similar to the name for the area index page but you need to replace the 'areaindex' in the file name with 'dataindex'.

For example:

URL to area index page: .../report\_Nottinghamshire\_Wards\_areaindex.html

URL to data index page: .../report\_Nottinghamshire\_Wards\_dataindex.html

If you want to link from the home page to the data index page rather than to the area index page you simply need to change the link by manually editing the atlas.html page.

Figure 210

Benefits	
Attendance Allowance claimants (%) - 2008	
<b>Disability Living Allowance claimants (%)</b>	
2002	
2003	
2004	
2005	
2006	
2007	
2008	
<b>Incapacity Benefit claimants (%)</b>	
1999	
2000	
2001	
2002	
2003	

Clicking on the name of a theme, indicator or time period in the data index page will open the relevant theme, indicator or time period page.

### L.3.5. Theme Page

The theme page lists all indicator values for all time periods for the selected theme. It includes a table for comparison areas and a table with the data for all base geography features (Figure 211).

Figure 211

Benefits																		
	Attendance Allowance claimants (%)	Disability Living Allowance claimants (%)						Incapacity Benefit claimants (%)										
		2002	2003	2004	2005	2006	2007	2008	1999	2000	2001	2002	2003	2004	2005	2006	2007	
East Midlands	14.86	4.19	4.35	4.49	4.60	4.72	4.85	5.03	6.94	7.06	7.27	7.24	7.18	7.05	6.86	6.72	6.64	6.62
England	14.64	3.76	3.93	4.06	4.15	4.23	4.65	4.80	6.63	6.70	6.85	6.83	6.83	6.80	6.64	6.50	6.82	6.71
Nottingham	18.22	6.00	6.11	6.16	6.18	6.21	6.32	6.47	9.66	9.91	10.37	10.09	9.80	9.51	9.18	8.97	8.84	8.83
Nottinghamshire	15.09	4.63	4.82	4.97	5.12	5.25	5.41	5.63	7.98	8.07	8.31	8.24	8.17	8.02	7.76	7.61	7.54	7.45

Benefits																	
	Attendance Allowance claimants (%)	Disability Living Allowance claimants (%)						Incapacity Benefit claimants (%)									
		2002	2003	2004	2005	2006	2007	2008	1999	2000	2001	2002	2003	2004	2005	2006	2007
Abbey	13.82	2.55	2.77	2.53	2.86	2.88	3.03	2.92	4.41	4.41	4.23	4.42	4.05	3.80	3.61	3.49	3.63
Arboretum	19.02	6.01	5.88	5.65	5.65	5.85	5.65	5.65	10.88	10.75	11.82	11.25	10.83	10.15	9.56	9.26	9.05
Aspley	16.76	6.50	6.75	6.76	6.95	7.15	7.21	7.45	11.30	12.29	13.32	12.87	12.55	12.44	12.06	11.77	11.38
Attenborough	13.05	2.44	2.63	2.64	2.89	2.65	2.43	2.21	4.53	4.91	4.53	4.19	4.14	4.07	4.52	4.09	2.97
Awsworth	12.38	4.37	4.11	3.89	4.37	4.59	4.92	5.13	6.13	6.77	7.74	7.33	6.65	7.27	7.30	6.37	6.85



### L.3.6. Indicator Page

The indicator page lists the indicator values for all time periods for the selected indicator. It includes a table for comparison areas and a table with the data for all base geography features (Figure 212).

Figure 212

Home | Nottinghamshire Wards | Benefits | Disability Living Allowance claimants (%)

Select an area profile... | Select a dataset...

#### Disability Living Allowance claimants (%)

Disability Living Allowance claimants (%)							
	2002	2003	2004	2005	2006	2007	2008
East Midlands	4.19	4.35	4.49	4.60	4.72	4.85	5.03
England	3.76	3.93	4.06	4.15	4.23	4.65	4.80
Nottingham	6.00	6.11	6.16	6.18	6.21	6.32	6.47
Nottinghamshire	4.63	4.82	4.97	5.12	5.25	5.41	5.63

Disability Living Allowance claimants (%)							
	2002	2003	2004	2005	2006	2007	2008
Abbey	2.55	2.77	2.53	2.86	2.88	3.03	2.92
Arboretum	6.01	5.88	5.65	5.65	5.85	5.65	5.65
Aspley	6.50	6.75	6.76	6.95	7.15	7.21	7.45
Attenborough	2.44	2.63	2.64	2.89	2.65	2.43	2.21
Awsworth	4.37	4.11	3.89	4.37	4.59	4.92	5.13
Balderton North	2.69	3.06	3.05	3.15	3.33	3.69	3.87
Balderton West	3.62	3.63	3.72	4.08	4.23	4.55	4.87
Basford	5.95	6.08	6.52	6.42	6.74	6.94	7.11

### L.3.7. Time Period Page

The time period page lists the indicator values and associate values for the selected indicator and time period. It includes a table for comparison areas and a table with the data for all base geography features (Figure 213).

Figure 213

Home | Nottinghamshire Wards | Benefits | Disability Living Allowance claimants (%) | 2008

Select an area profile... | Select a dataset...

#### Disability Living Allowance claimants (%) - 2008

[Click to view in atlas...](#)

Disability Living Allowance claimants (%) - 2008		numerator
Nottingham	6.47	-
Nottinghamshire	5.63	-
East Midlands	5.03	-
England	4.80	-

Disability Living Allowance claimants (%) - 2008		numerator
Ravensdale	11.78	490
Bilborough	11.73	1925
Worksop South East	11.69	920



## M. THE INSTANTATLAS ARCGIS ONLINE TEMPLATES

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## M.1. About this Section

This section describes the use of the InstantAtlas ArcGIS Online templates.

The ArcGIS Online templates are HTML Edition templates which allow you to build dynamic reports based on ArcGIS Online content. The final report automatically gets uploaded into your ArcGIS Online account and is then hosted there as a Web Application where you can control who can access it. Any changes made to the data sources will automatically and instantly be visible in your ArcGIS Online dynamic report.

For more information about ArcGIS Online please refer to:

<http://www.esri.com/software/arcgis/arcgisonline>

It is assumed that you have already read section 'B. The InstantAtlas Desktop Publisher', section 'C. The InstantAtlas Designer' and section 'E. The InstantAtlas Excel Data Manager'.

## M.2. Publishing an ArcGIS Online Dynamic Report

You can choose an ArcGIS Online template from the drop down list in the Publisher. The currently available ArcGIS Online templates are:

1. ArcGIS Online – Single Map (HTML Edition)
2. ArcGIS Online – Double Map (HTML Edition)
3. ArcGIS Online – Area Profile (HTML Edition)

After choosing one of the ArcGIS Online templates and clicking 'Next' in the Publisher, you will be asked to sign in to your ArcGIS Online account (Figure 214).

Figure 214



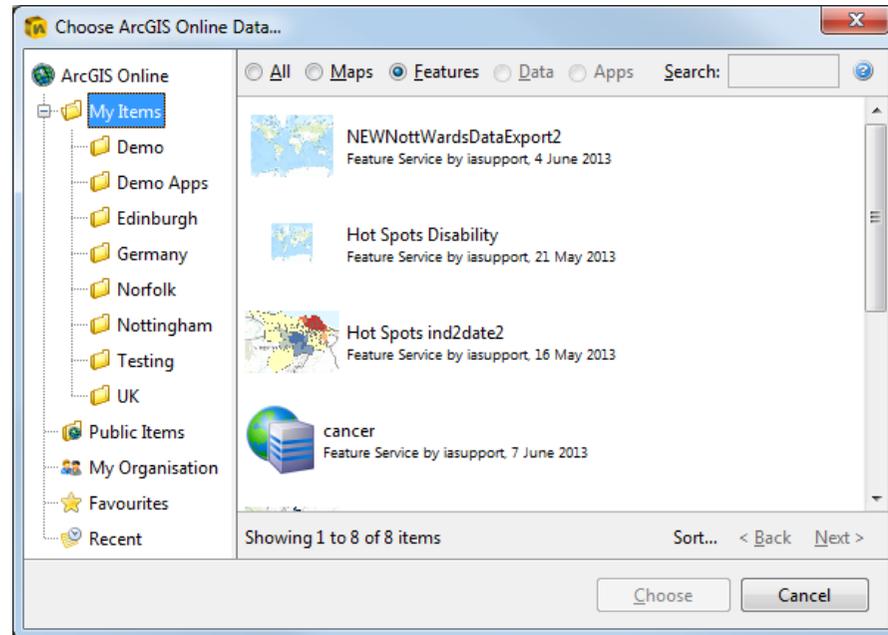
### M.2.1. Selecting Items from ArcGIS Online

For your map layers (base and contextual geographies as well as background layers) you can choose 'items' from ArcGIS Online. It is not possible to use digital map files saved locally on your computer or on a network drive when publishing a report with the ArcGIS Online templates. Also you cannot use map services from any other sources as background layers except for those available within ArcGIS Online (and only those supported by InstantAtlas).

When you add a new base geography, contextual geography or background layer, the 'Choose ArcGIS Online Data...' dialog will appear (Figure 215). This dialog works in a similar way to the file explorer on your operating system.



Figure 215



The left hand side of the window displays a list of available folders. On clicking a folder the main pane on the right hand side is then populated with the contents of that folder. The different folders are described below.

### My Items

In the 'My Items' folder you can access your own items. If your items are organised in custom folders within ArcGIS Online you will see those folder as subfolders within the 'My Items' directory.

### Public Items

The 'Public Items' folder contains all items that were made publically available by other users of ArcGIS Online.

### My Organisation

If you have an organisational account the folder 'My Organisation' contains all items of users that belong to your organisation.

### Favourites

The Favourites folder contains all items you have added to your favourites. You can add an item to your favourites by right-clicking on the item and selecting 'Add to Favourites'. If the item shows a preview image, a yellow star icon will appear on the image once you added it to the favourites. To remove an item from your favourites, right-click on the item and select 'Delete Favourite'.

### Recent

The 'Recent' folder contains all recently used items.

At the top of the dialog you can filter the items by type:

**Maps** – lists Web Maps. This option is available for base geography, contextual geography and background layers.

**Feature** – lists Feature Services. This option is available for base geography and contextual geography layers.

**Data** – lists CSV items. This option is available when adding further attribute data to build the data model for the ArcGIS Online dynamic report. Please refer to section 'M.2.3. Data Preparation'.



**Apps** – lists Web Mapping Applications. This option is available when opening an existing ArcGIS Online dynamic report through the ‘File’ menu of the Publisher. Please refer to section ‘M.2.7. Opening an Existing Web Application’.

**All** – lists all items of the supported types.

The ‘Search’ and the ‘Sort’ functions can also be used to find the items you wish to use.

The resulting items will be displayed in main pane of this dialog. If there are more than 15 items in the list, the Publisher will show them on several pages. The ‘Next>’ and ‘<Back’ buttons can be used to navigate between the pages.

A right-click on an item will cause a context menu to appear. The top option ‘Details’ opens a new browser window or tab with the details page of this item. The second and third options in the context menu allow you do add items to your favourites or to remove them from your favourites. Items added to your favourites will appear in the ‘Favourites’ folder which can be selected from the left-hand side pane. The fourth option of the context menu allows you to filter the items further by the owner of the item that you have clicked on.

When choosing your base layer you can either select a Feature Service which would add a single base layer to the Publisher or you could choose a Web Map which may include multiple layers. Depending on how the selected Web Map is configured, these layers will automatically be added to the Publisher as either base geographies, contextual geographies or – in case of raster images - background layers.

You can select an item by clicking on it so that it becomes highlighted and then press the ‘Choose’ button.



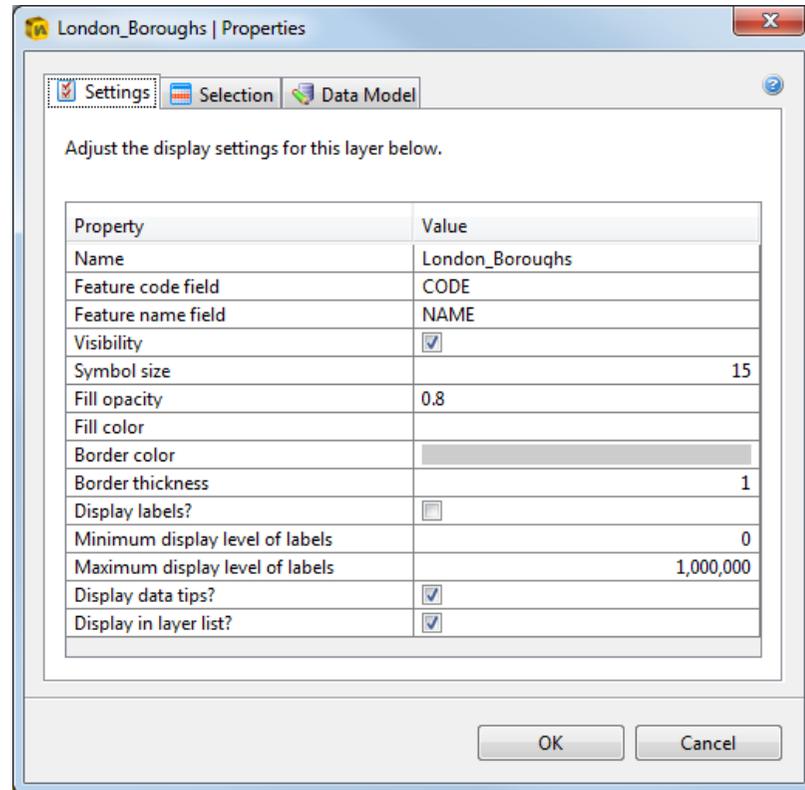
Please note that it is not possible to add a Web Map that only contains raster images at the ‘Choose Your Base Geography’ step of the Publisher. Also, it is not possible to add a Feature Service that does not contain any attribute data.

### M.2.2. Layer Properties

The layer properties of each map layer can be opened by clicking on the ‘Properties’ button (Figure 216).

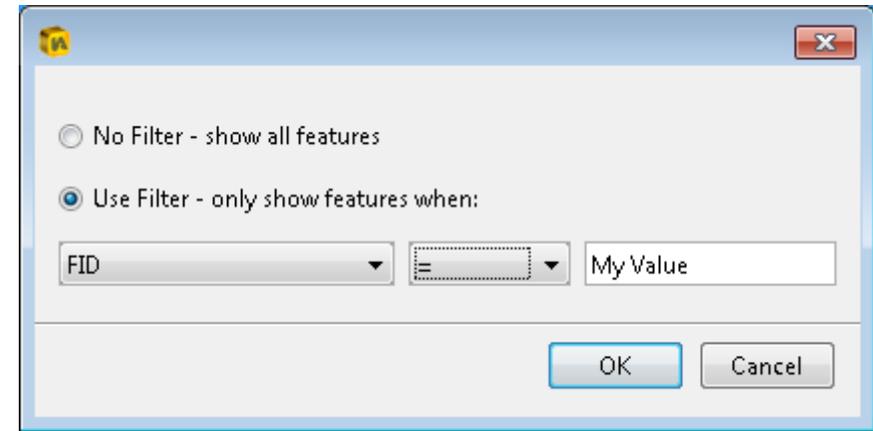


Figure 216



The tabs 'Settings' and 'Selection' for base and contextual layers work in the same way as for templates used to create stand-alone dynamic reports. Please see sections 'B.3.2.2. Layer Properties of Base Geography Layers' or 'B.3.4.2. Layer Properties of Contextual Geography Layers' for further information. Additionally, the 'Selection' tab includes a filter function which allows you to filter the features of this layer depending on the attribute values. Clicking on the 'Filter' button opens a new dialog (Figure 217).

Figure 217



If you do not want to apply a filter i.e. you wish to see all features in the 'Selection' tab of the layer properties dialog you should select the option 'No Filter – show all features' This option is selected by default.

If you wish to apply a filter to reduce the amount of features shown in the 'Selection' tab of the layer properties dialog you should select the option 'Use Filter – only show features when'. Then select the attribute field you wish to base your filter on from the drop down list on the left. The drop down list in the middle provides a number of operators which are explained in the table below:

Operator	For ... attribute fields	Description
=	numeric	'equal to'
<>	numeric	'not equal to'
>	numeric	'greater than'
>=	numeric	'greater than or equal to'
<	numeric	'less than'



<=	numeric	'less than or equal to'
contains	numeric or textual	'contains'
starts with	numeric or textual	'starts with'
ends with	numeric or textual	'ends with'

In the text field on the right type the filter value. Then click 'OK' to apply the filter.

When using ArcGIS Online templates the layer properties of base and contextual layers do not contain the tabs 'Coord. System' and 'Encoding' as they do not apply.

The third tab of the layer properties of a base geography layer allows you to create the data model out of the attribute data of this layer. Please refer to the next section 'M.2.3. Data Preparation' for further information.

### M.2.3. Data Preparation

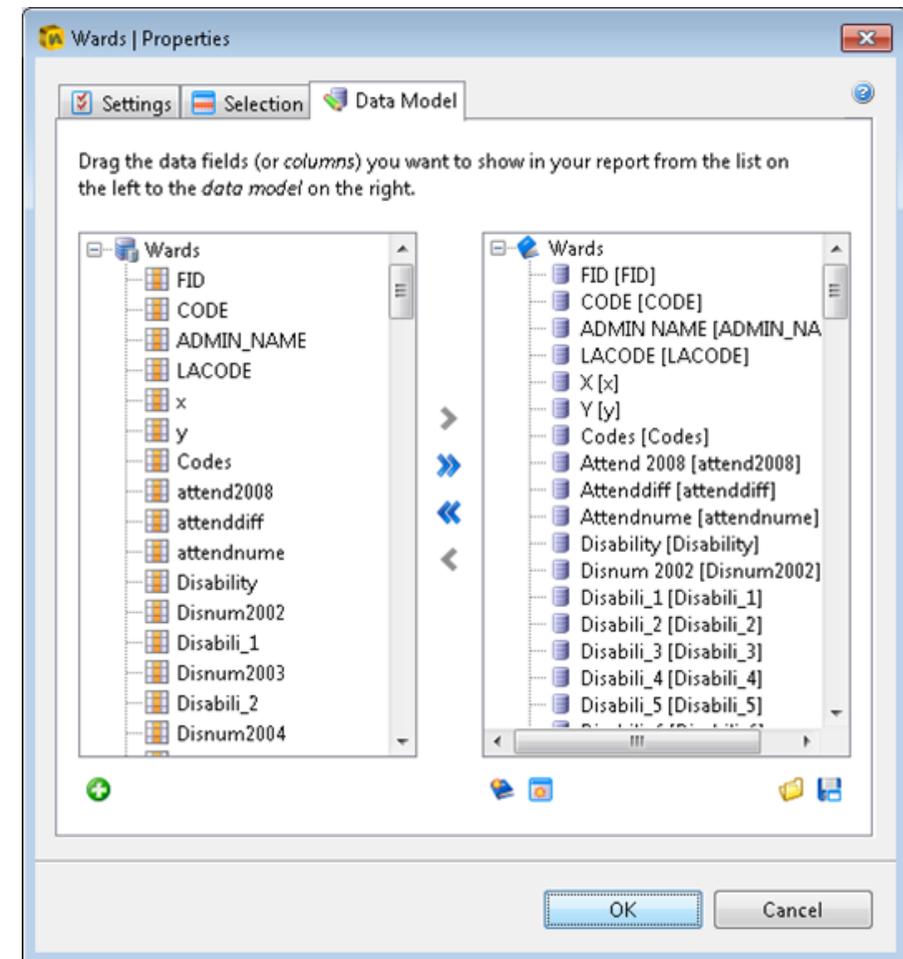
The data for an ArcGIS Online dynamic report is built out of the attribute data of the base geography layer(s) and/or further data in CSV format. CSV files first need to be uploaded to ArcGIS Online to be able to use the containing data in an ArcGIS Online dynamic report.



Please note that it is not possible to publish an ArcGIS Online dynamic report with demo data or to upload a data.xml file into the Publisher.

To build the data model for your base geography layer, open the layer properties by clicking the 'Properties' button and then choose the 'Data Model' tab (Figure 218).

Figure 218



This dialog works in the same way as the 'Organise Data' dialog that appears when you select the option 'Create a data file from digital map data' for non-ArcGIS Online templates. Please refer to section 'B.3.3.3. Create a Data File from a Digital Map File' for information on how to build a data model.



For ArcGIS Online templates you do have the option to add data from a CSV file into your data model. To add a CSV file, click the green  button on the bottom left corner of the 'Data Model' tab.

You can now choose one of the CSV files on ArcGIS Online to add to your data. You will be asked to select a column from within the CSV file that matches the values of the feature code field you chose for the base geography layer. If such a column does not exist you will not be able to use this CSV file in the data model for the selected layer.

The Publisher will validate that the selected column matches the codes of the base geography layer. If it does, the columns of the CSV file will be added to the left hand side list of available data fields. They can now be used in the same way as if the columns from the CSV file were attribute fields of the base geography.

If the Publisher detects a partial match between the code field selected from the CSV file and the feature code field of the base geography layer it will give a warning and inform you on how the non-matching features/rows will be handled in the final report.

### M.2.4. Finalising the Report

After you have added all base geographies, contextual geographies and background layers that you wish to use within your ArcGIS Online dynamic report you can move on to the 'Choose Settings For Your Dynamic Report' step of the Publisher. Here you can choose one of the pre-defined colour profiles or create your own one using the 'Custom' option in the drop down list. If you are using the ArcGIS Online Area Profile (HTML Edition) Template you will also have the option to choose which configuration you

would like to use for the report. Please refer to section 'I. The InstantAtlas Area Profile Template' for further information on the different configuration options and the required data structure for each of them.

You can also adjust the map margin on the 'Advanced' tab.

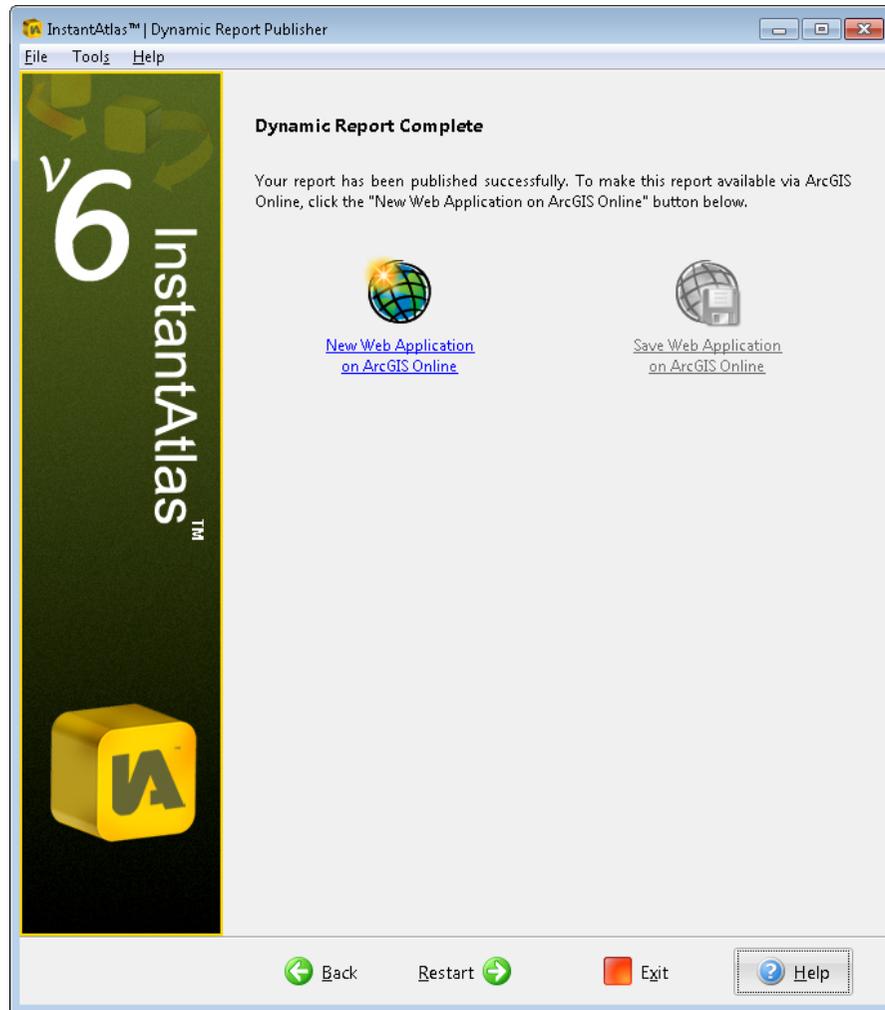
Once you are happy with the settings click the 'Publish' button. The last screen of the Publisher will now give you the option to create a new Web Application on ArcGIS Online or to save (or update) an existing Web Application (Figure 219). The latter option is only available if you:

1. have opened an existing ArcGIS Online dynamic report through the 'File' menu, or
2. have created a new Web Application beforehand in the same Publisher instance (i.e. pressed the 'Restart' button).

Both options will launch the 'Create Web Applications' dialog box when you select them. Please refer to the next section M.2.5. The 'Create Web Application' Dialog for further information.



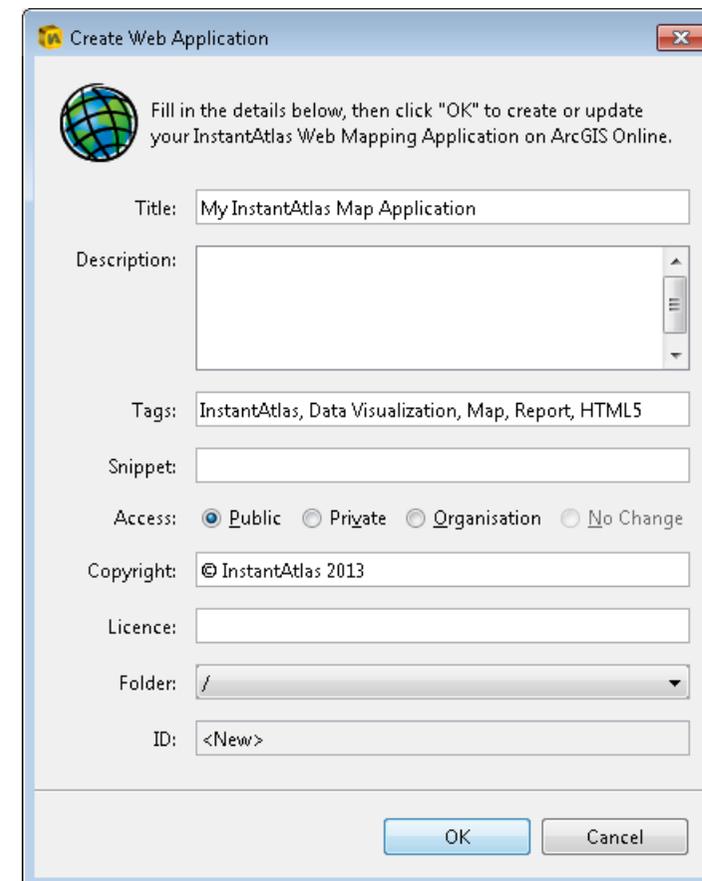
Figure 219



## M.2.5. The 'Create Web Application' Dialog

The 'Create Web Application' dialog (Figure 220) opens when you click on either 'New Web Application on ArcGIS Online' or 'Save Web Application on ArcGIS Online' after your report has been published. If you have selected the former option, some settings will be filled with default values. If you have selected the latter option the settings will be filled with the current values of this Web Application loaded from ArcGIS Online.

Figure 220



Please note that you can change these settings also on the details page of the Web Application within ArcGIS Online.

**Title** – Enter a title for the Web Application.

**Description** – This can be a detailed description of the dynamic report which will be visible on the details page of the Web Application within ArcGIS Online.

**Tags** – Enter keywords that other users might use to search for your dynamic report.

**Snippet** – Enter a short summary description of the dynamic report. This will show on the details page of the Web Application within ArcGIS Online just below the title. The snippet is also visible in the tooltip of an existing Web Application when trying to open it in the Publisher or Designer.

**Access** – Define who will be able to see your dynamic report. Choose 'Public' if you wish to share it with everyone, choose 'Private' if it should only be visible by yourself or choose 'Organisation' if you want to restrict access only to users of the same organisation account.

**Copyright** – Enter any copyright information for the Web Application.

**Licence** – Enter any license information or restrictions.

**Folder** – You can create the new Web Application in any of your custom folders you have already created within your ArcGIS Online account.

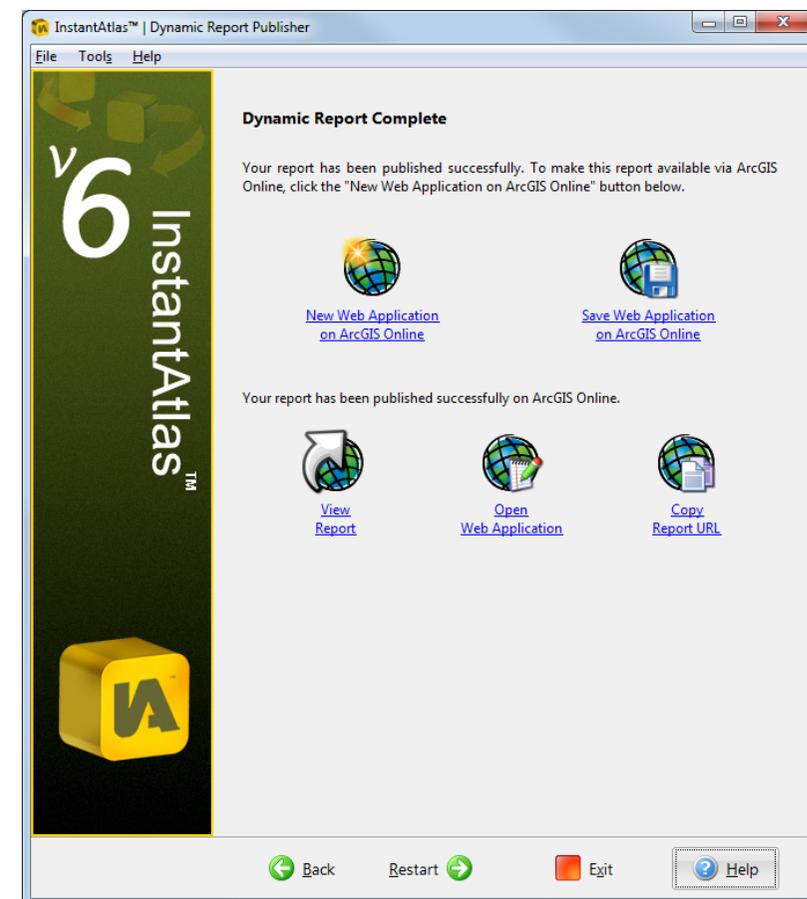
**ID** – This field can't be edited and only serves as a reference.

Once you are happy with the settings for your Web Application click 'OK'. Your Web Application will be created / updated on ArcGIS Online.

## M.2.6. Additional Options on the last Publisher Screen

Once you have created a new Web Application or saved/updated an existing one, three further options will appear on the Publisher screen (Figure 221).

Figure 221



**View Report** – This opens the ArcGIS Online dynamic report a new browser window or tab.

**Open Web Application** – This opens the details page of the Web Application. This page enables you to edit the settings of the Web Application, set who has access and to open the dynamic report.

**Copy Report URL** – This copies the report URL into your clipboard which enables you to then easily paste this into an email or use it in an internet browser which is not your default browser.

### M.2.7. Opening an Existing Web Application

There are two reasons why you may want to open an existing ArcGIS Online Web Application:

1. if you wish to change any settings an existing ArcGIS Online dynamic report that need to be done in the Publisher e.g. the layer settings or the data model, or
2. if you wish to create a new ArcGIS Online dynamic report based on the settings of an existing ArcGIS Online dynamic report.

To open an existing ArcGIS Online Web Application in the Publisher click on 'File' and then 'Open ArcGIS Online Application'. This will launch the 'Choose ArcGIS Online Application' dialog which works in the same way as the 'Choose ArcGIS Online Data' dialog described in section 'M.2.1. Selecting Items from ArcGIS Online'.

Once you have chosen a Web Application, the Publisher will download all layer definitions and settings of the dynamic report into the Publisher. You then have the ability to change these settings if you wish.

After your report has been published you can then choose if you want to create a new Web Application or if you want to update the one that you opened in the Publisher. Please select 'New Web Application on ArcGIS Online' or 'Save Web Application on ArcGIS Online' respectively.

## M.3.Editing an ArcGIS Online Dynamic Report using the Designer and Style Editor

The only way to edit the config.xml and default.css files of an ArcGIS Online dynamic report is by opening the ArcGIS Online Web Application in the InstantAtlas Designer.

### M.3.1. Opening an ArcGIS Online Application

To open an ArcGIS Online Application you will need to first start the Designer, then select 'File' and then 'Open ArcGIS Online Application'. Alternatively you can click on the second icon from the left in the Designer toolbar. If you haven't yet signed in to your ArcGIS Online account in this Designer session you will be asked to do so. The Designer will then launch the 'Choose ArcGIS Online Application' dialog which works in the same way as the 'Choose ArcGIS Online Data' dialog described in section 'M.2.1. Selecting Items from ArcGIS Online'.



### M.3.2. Designing the ArcGIS Online Dynamic Report

You can edit the layout, settings and styles of the dynamic report as described in section 'C.4. Creating a New Design'.



Please note: It is currently not possible to upload any custom files such as logos, banners, downloadable datasets etc. to ArcGIS Online. Therefore if you wish to use custom files in your ArcGIS Online dynamic report you will need to first upload them to a web server and then enter the web link to the file into the URL field of the image or button component in the Designer.

### M.3.3. Styling the ArcGIS Online Dynamic Report

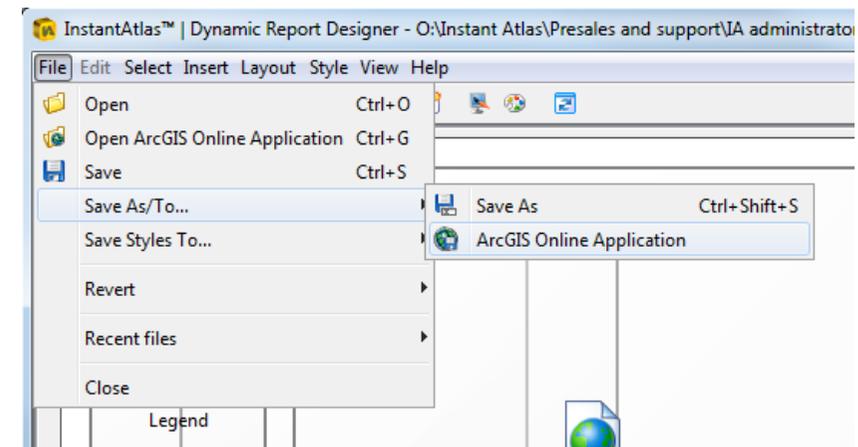
All style classes should be available through the 'Styles' tab of the properties pane. This will list only those style classes that are relevant to the selected component. If no component is selected it will list all style classes that are relevant for the report as a whole. If you wish to see the complete list of style classes you can open the Style Editor through the main menu (select 'Style' and then on 'Edit Styles') or toolbar (third icon from the right) of the Designer. The Style Editor also allows a global find and replace of style properties which cannot be achieved through the Designer. Once you are happy with the changes in the Style Editor you need to save them back to the Designer by selecting 'File' and then 'Apply' in the main menu of the Style Editor. Alternatively you can use the  icon in the toolbar. Then close the Style Editor.

### M.3.4. Saving changes back to ArcGIS Online

You can save the changes back to the Web Application you opened simply by clicking the 'Save' button or selecting 'File' and then 'Save'. This will save both the configuration changes as well as the stylesheet changes so that the config.xml and the default.css files of the Web Application within ArcGIS Online are updated.

You can also save the changes to a different ArcGIS Online Web Application. To do this select 'File' from the main menu, then 'Save As/To...' and then 'ArcGIS Online Application' (Figure 222).

Figure 222



This will launch the 'Choose ArcGIS Online Data' dialog. Please find further information on how to use this in section 'M.2.1. Selecting Items from ArcGIS Online'. You will need to ensure that you pick an Application that was created with the same template that the configuration you are editing belongs to.





The ability to save an open configuration to an ArcGIS Online Web Application enables you to apply the config.xml and default.css files from a stand-alone dynamic report to an ArcGIS Online dynamic report. The steps required to do this are as follows:

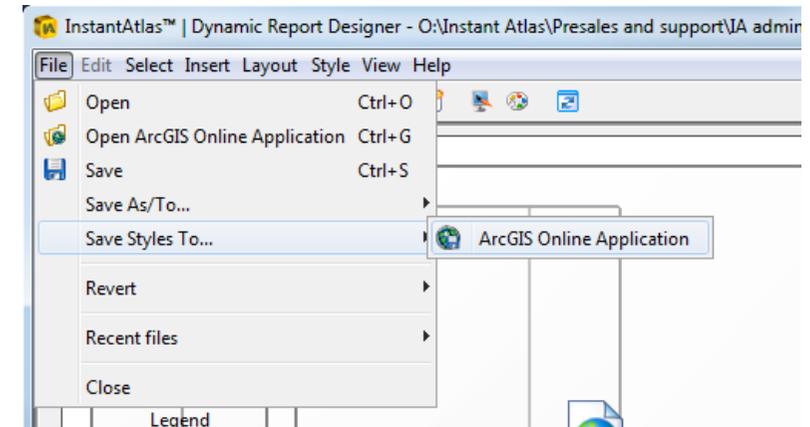
1. Open the config.xml file of the standalone report in the Designer. If the default.css file is saved in the same folder as the config.xml file it will automatically be included.
2. Now select 'File from the main menu, then 'Save As/To' and then 'ArcGIS Online Application'.

This will save both the config.xml file as well as the default.css file to the ArcGIS Online dynamic report. If you prefer to only save the config.xml file, you should first move the config.xml file into a separate folder without any default.css file and then follow the steps above.

It is also possible to only save a stylesheet to an ArcGIS Online Web Application. To do this, follow the steps below:

1. First you need to ensure that the default.css file is saved in a folder together with a config.xml file. It doesn't matter what kind of config.xml file this is (i.e. which HTML template was used to create it) or how it is configured.
2. Open the config.xml file in the Designer.
3. Select 'File from the main menu, then 'Save Styles To...' and then 'ArcGIS Online Application' (Figure 223).

Figure 223



4. This will launch the 'Choose ArcGIS Online Data' dialog. Please find further information on how to use it in section 'M.2.1. Selecting Items from ArcGIS Online'.

This will only update the stylesheet of the ArcGIS Online dynamic report; the configuration will not be changed.



## N. INSTANTATLAS SUPPORT

You can find IA support resources at [www.instantatlas.com/support.xhtml](http://www.instantatlas.com/support.xhtml). InstantAtlas customers can login to their 'My InstantAtlas' account at [www.instantatlas.com/mia](http://www.instantatlas.com/mia) and download a wide range of support resources and access a searchable knowledgebase. If these resources do not provide a solution, please contact your support provider.

