

ISG-1.56: iShare GIS for Users

1. Introduction
2. Basic Functionality
 - 2.1. Using the Navigation Tool
 - 2.2. Collapsible docked windows
3. The Application Bar
4. The Profiles button
5. The Find button
 - 5.1. Using Find Address
 - 5.2. Using Find Nearest
 - 5.3. Using Find Features
6. The Basemap button
7. The Layers button
8. Map Categories
9. The Information Browser
10. Searching in iShare GIS
11. The Print button
 - 11.1. Printing to PDF
 - 11.2. Printing to Image
12. The View button
13. Measuring
 - 13.1. Measuring a distance
 - 13.2. Calculating an area
14. Making a spatial selection
 - 14.1. Using the Circle tool
 - 14.2. Using the Polygon tool
15. Filtering Features in a Layer
16. Annotation Layers
 - 16.1. Create a New Annotation Layer
 - 16.2. Adding Features to your Annotation Layer
 - 16.3. Editing Annotation Features

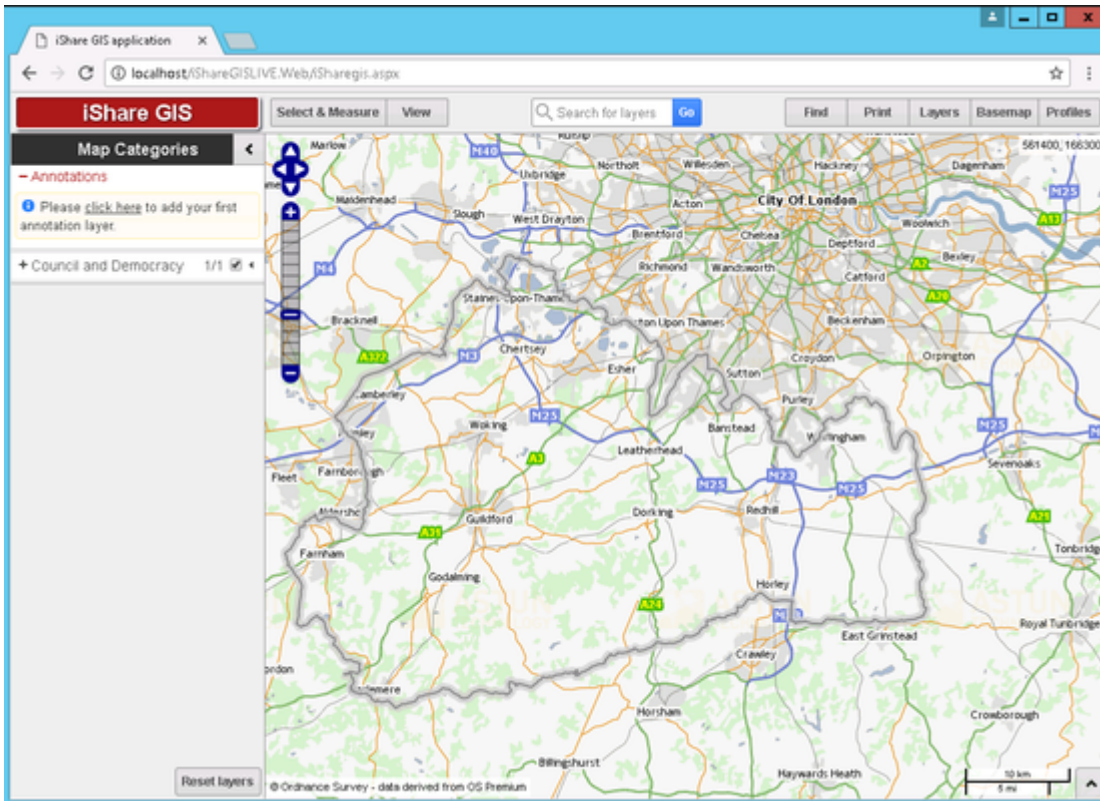
An Astun Technology iShare Training Module

Code	ISG-1.56
Title	iShare GIS for Users
Description	Covers the web interface. Required for Administrators, can also be used by customers to train end users.
Required Software	iShare GIS 5.6.0 or later
Target Audience	iShare GIS users
Pre-requisites	None
Duration	.5 day
Version	1.0
Updated	28 Sep 2017
Updated by	Kim Stimpson
Status	Complete

1. Introduction

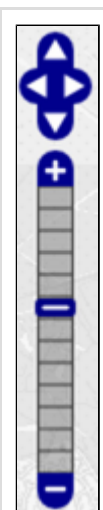
This module is aimed at end users of iShare GIS. It will demonstrate what you can see and do within the iShare GIS web application.

The URL for the application on Astun's standard training instances is <http://localhost/iShareGISLIVE.Web/iSharegis.aspx>.



2. Basic Functionality

2.1. Using the Navigation Tool



The Navigation Tool zooms and scrolls by pre set units.

Have a go at moving around the map and zooming in and out.

There are also various mouse and keyboard shortcuts, for example:

- If you hold down the shift key you will be able to perform a marquee selection: click and drag to draw a rectangle to zoom into a particular area of the map.
- You can use the scroll bar on your mouse to zoom in and out.
- You can use the arrows on your keyboard to move around the map.

2.2. Collapsible docked windows

If you have a look at the interface you will see a small arrow to the right of the **Map Categories** heading, and another at the bottom right hand side of the application window.

These can be used to Show or Hide the various windows to leave you with a smaller or larger Map window.

If you select the one at the bottom right hand side of the screen, it will display the Information Browser, but as we have not yet specified any information, it will not display any results for now.

3. The Application Bar



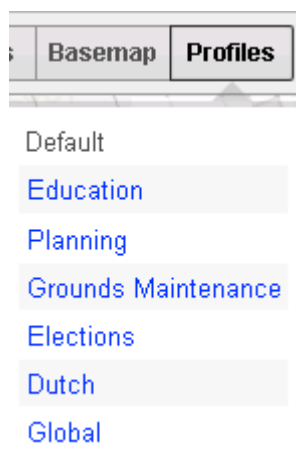
The buttons on the Application Bar allow the map tools that are frequently used to be shown all the time. Click on a button to display a quick dialog, such as a drop-down selection with further buttons or links, or a full dialog for entering or selecting details.

The **Search** box allows you to search **Layers** and **Metadata**. The search **Results** will have a **Show metadata** link if metadata is found matching your search criteria, clicking this will display all of the metadata for the Layer.

4. The Profiles button

If you have access to more than one map source in Studio, you will see a **Profiles** button in the Application Bar. This allows the user to switch between different map sources. In our Workshop environment we have several profiles.

- Click on the **Profiles** button



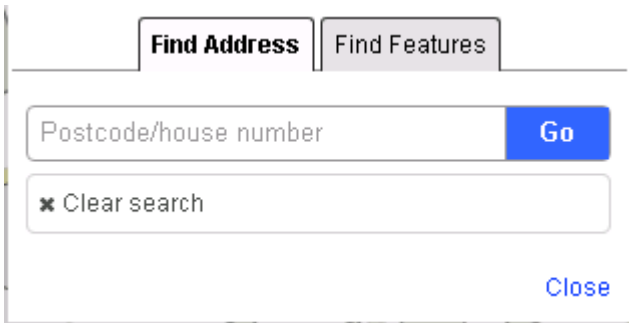
The currently selected profile is shown in black (**Default** in the above example), with other available profiles in blue. Let's leave the **Default** Profile for now.

5. The Find button

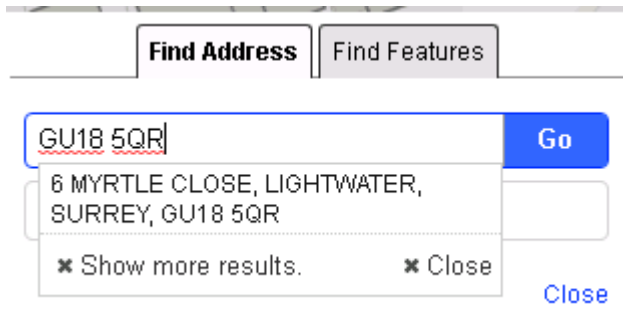
The **Find** button will normally have a **Find Address** tab, and a **Find Nearest** or **Find Features** if these options have been configured.

5.1. Using Find Address

Let's use the **Find** button to find a specific address.

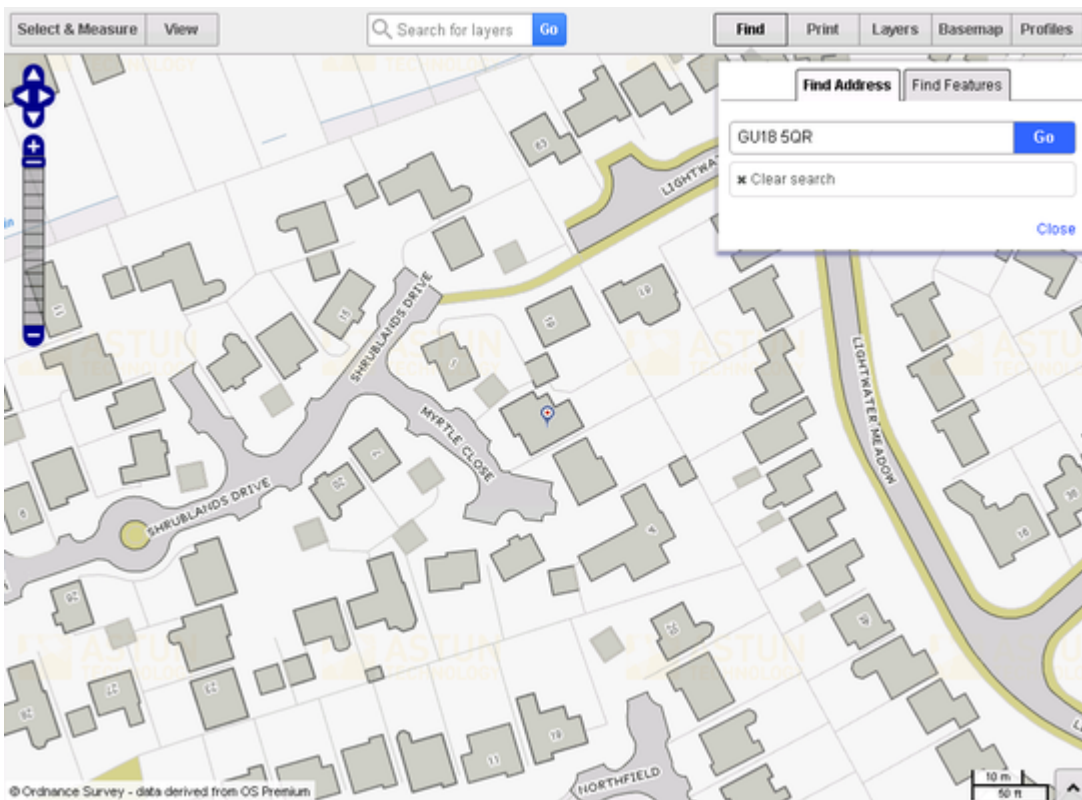


- With the **Find Address** tab selected enter “GU18 5QR” into the box and click **Go**.



Here you can see that one result has been returned.

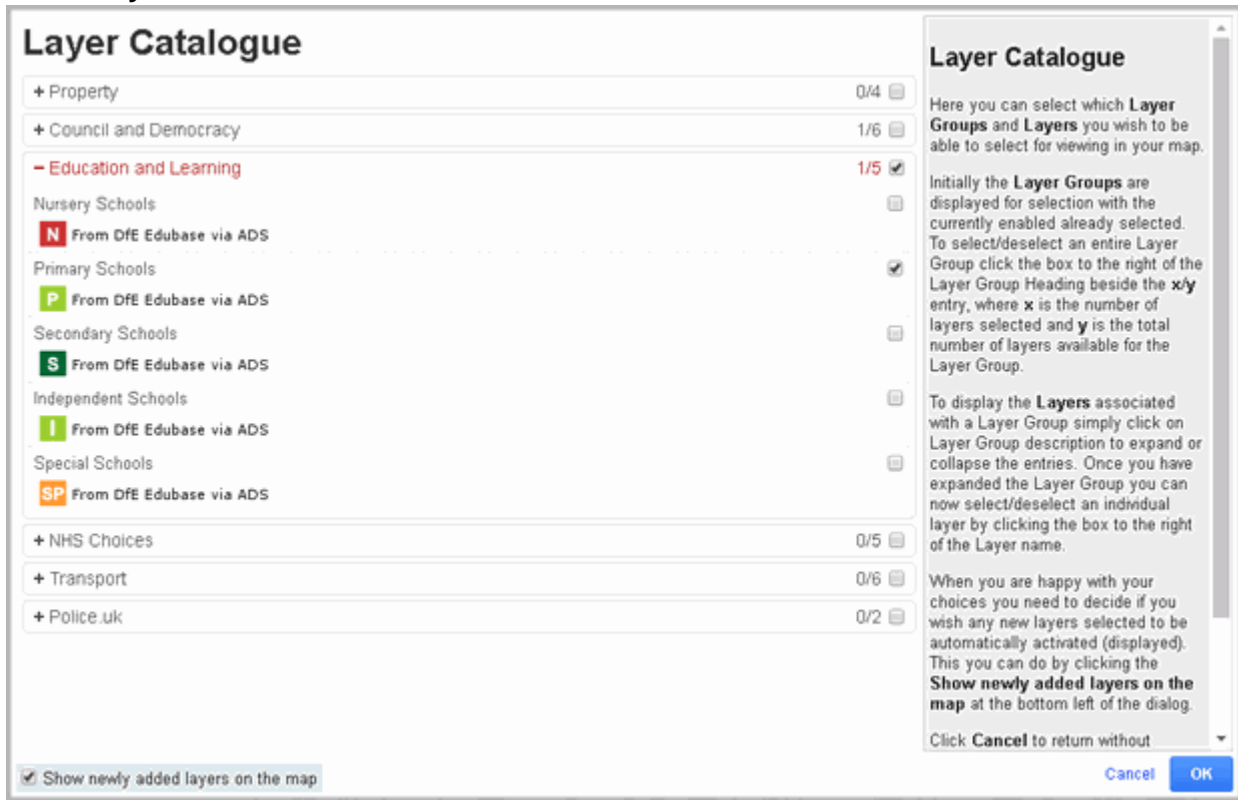
- Select the entry, and the map will zoom to the address, which will be highlighted with a pin; you will also find that it zooms in as shown in the following screenshot.



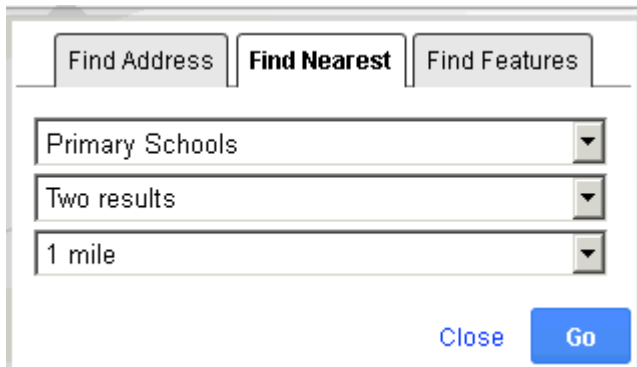
5.2. Using Find Nearest

Find Nearest is used to find the features from the layers you have loaded which are nearest to the selected location. Before we can use this function we need to add a Layer that has this functionality configured.

- Make sure you are in the **Default Profile**.
- Select **Layers**

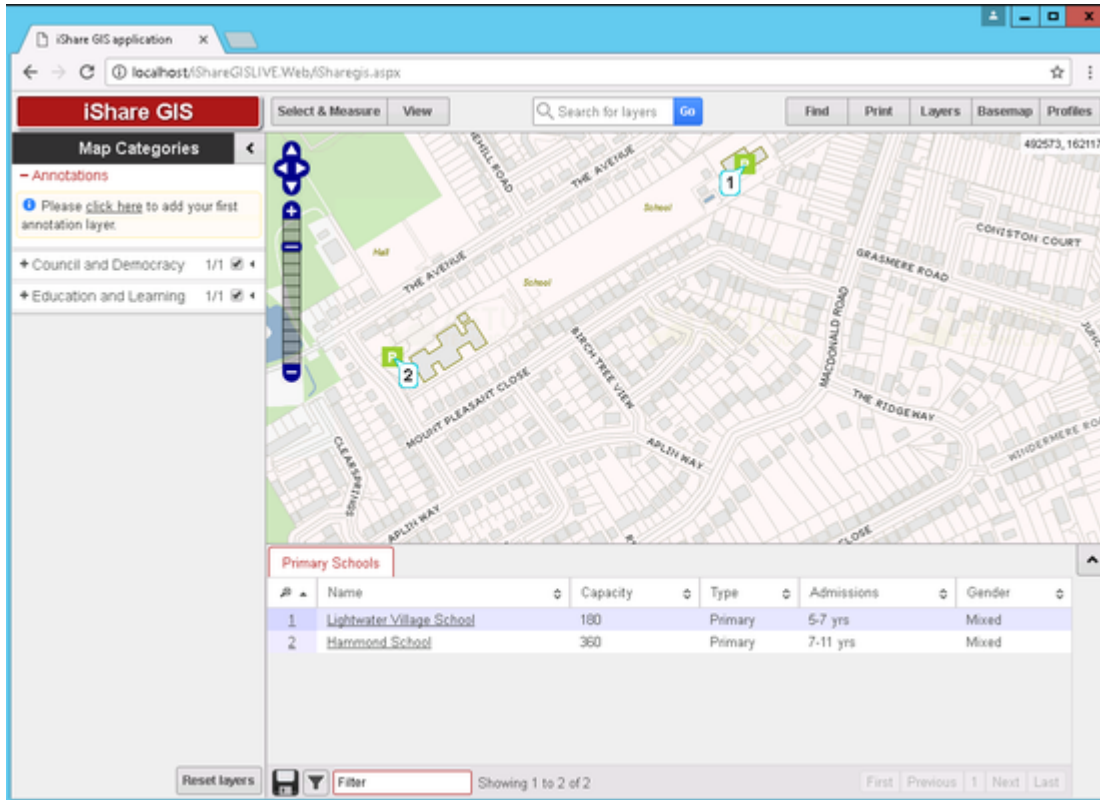


- Expand the **Education and Learning** entry and tick the box to display **Primary Schools**. Also tick the box **Show newly added layers on the map** and then click **OK**.
- Select the **Find > Find Nearest** tab.



The first drop down list displays all the layers that have been configured to use **Find Nearest** functionality. The second list allows you to select the maximum number of results that you wish to be returned, and the third list sets the distance from your chosen location within which the search will be carried out.

- Select **Primary Schools** from the top list, **Two results** from the second, and **1 mile** from the third and click **Go**.



The two nearest Primary Schools are shown on the map, and the **Information Browser** opens, displaying details of the results with reference numbers corresponding to the map locations, numbered by distance from the selected location. The first few results are shown, with a **Next** button to display more if required. At the same time, the Primary Schools layer is automatically switched on in the map.

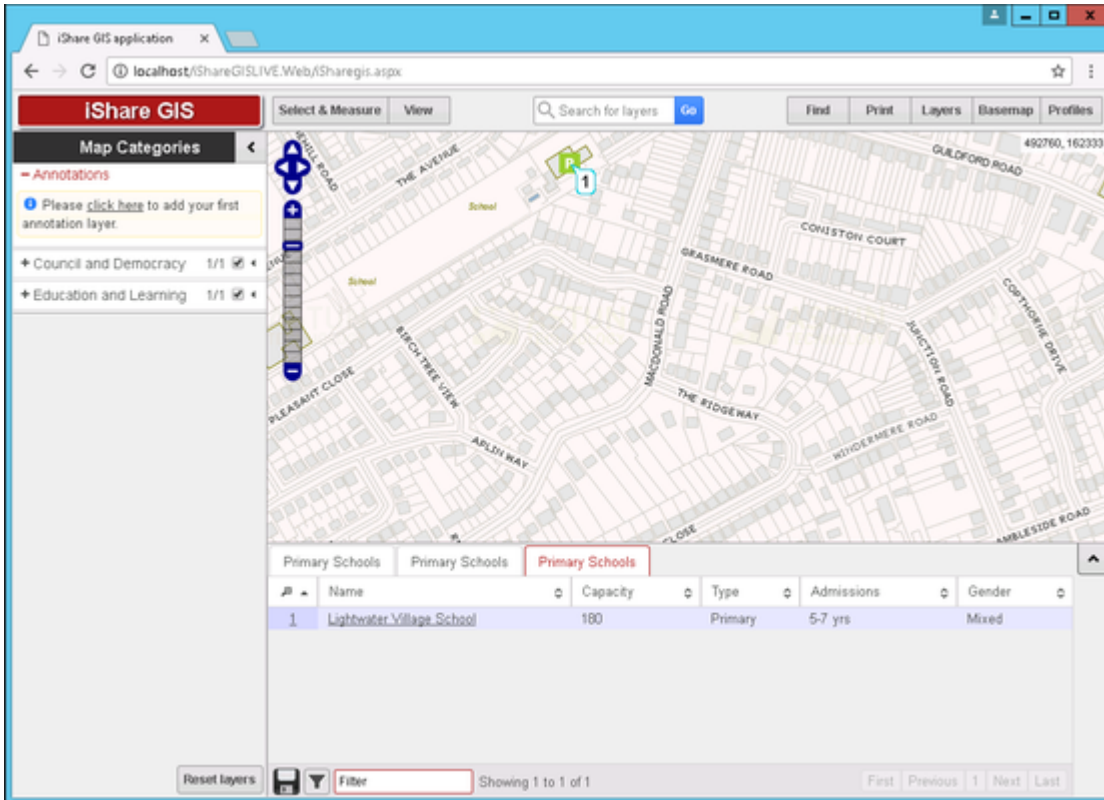
- To clear your results click the **Clear search results** button on the **Find Nearest** dialog.

The numbers will be removed from the map and the results cleared from the **Information Browser** but the **Primary Schools** layer will remain visible.

5.3. Using Find Features

Find Features allows you to search for features by entering all or part of their name.

- Select the **Find > Find Features** tab
- Select **Primary Schools** from the drop-down list
- Enter all or part of the name of the Primary School you want to find (if necessary, go back to the previous step to select a search string. For this workshop you can use 'lightwater'.)
- Click **Go**



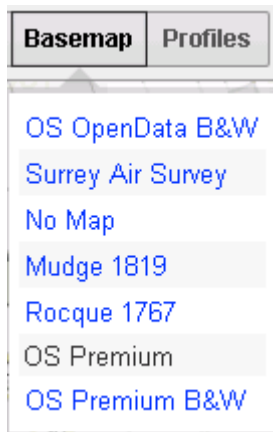
The features which match your search are shown on the map, in the same way as in **Find Nearest** in the previous step.

When you have finished searching just click on **Close** to close the **Find** dialog.

6. The Basemap button

This button is displayed if you have configured more than one base map layer. In the Workshop data we can switch between several base maps. A base map is the underlying map that is displayed as background to the layers that can be switched on and off using the Map Categories window. Only one base map can be shown at a time, and typical base maps include Aerial Photography, OS MasterMap, and OS Open.

- Click on the **Basemap** button.



The currently selected **Basemap** layer is the one in black (OS Premium in the above example), with the other available base maps shown in blue. This list may change depending upon the Profile you have picked as you can select which Base Maps are made available to a Map Source.

- Click on any of the other links to show a different base map.

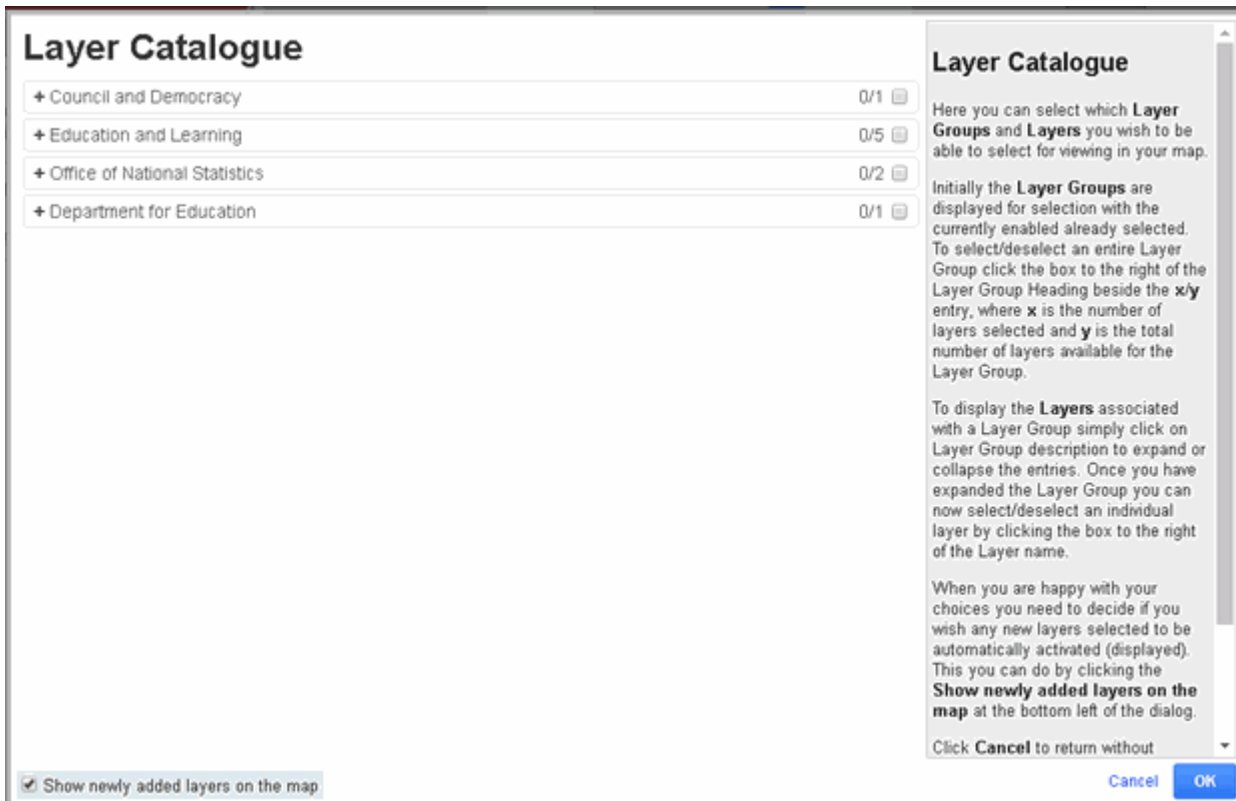
7. The Layers button

The Layers button will display the Layer Catalogue, showing the list of layers are available to include in your map.

For this exercise we need to select the **Education** profile from the **Profiles** button. As this is the first time that the **Education** profile has been selected, there are no layers selected in the Map Categories window.

Layers are added either by selecting the **Layers** button, or by clicking on [layer catalogue](#) link under No layers selected in the Map Categories window.

As we have selected the **Education** profile, you will see the Layer Groups that have been configured for the Education map source.

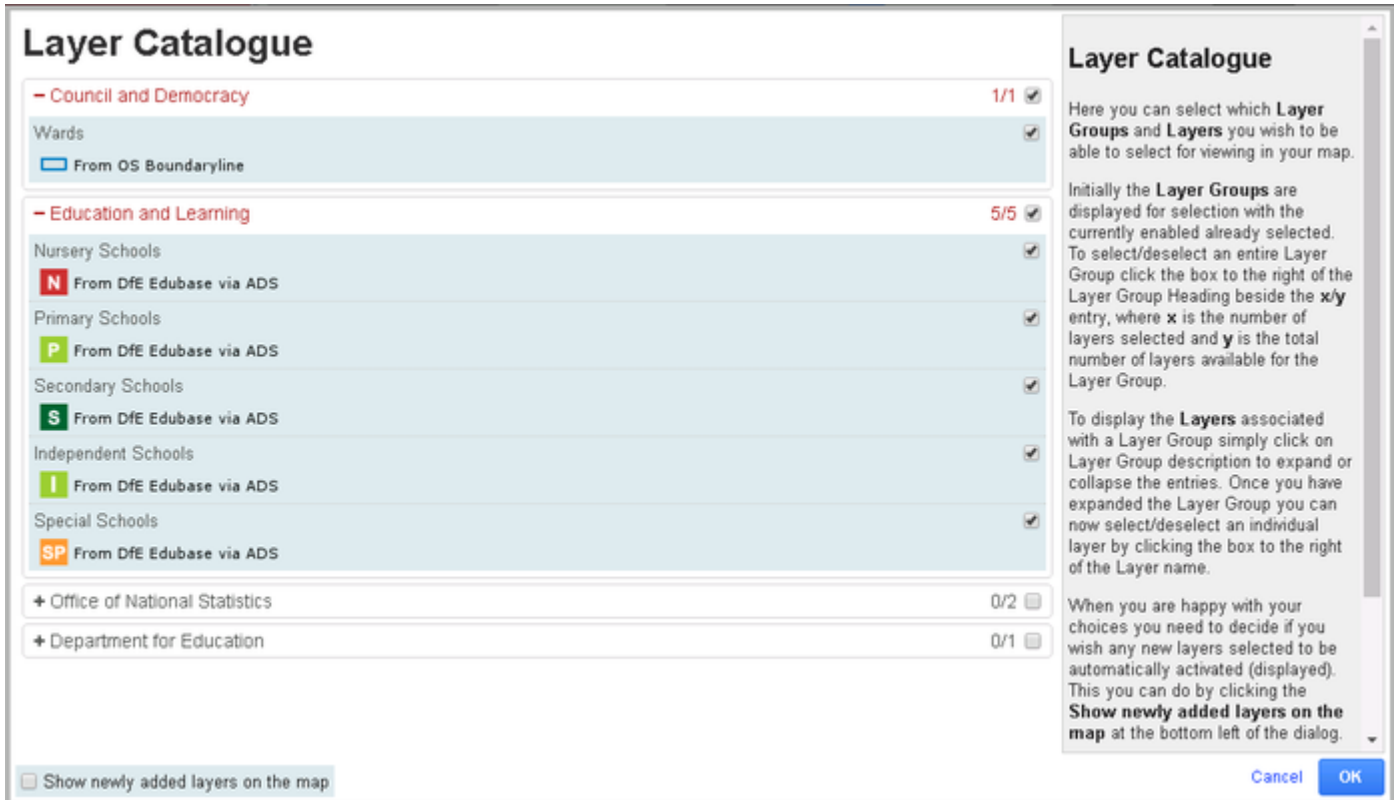


- Click on the plus sign beside the Layer Groups **Council and Democracy** and **Education and Learning**.

Now you can see the Layers that have been configured for each Layer Group.

You can either select an individual Layer or, if you click in the box for the Layer Group, all Layers for that Layer Group.

- For this exercise select both the Layer Groups, as shown in the following screenshot.



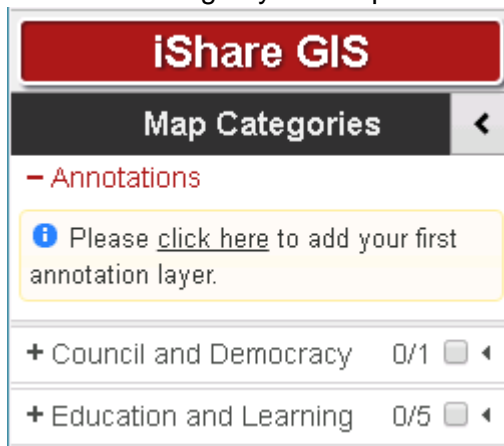
If you want the newly added layers to be displayed on the map, click the **Show newly added layers on the map** check box at the bottom left of the dialogue.

- For this exercise we won't tick this box, simply click **OK** to add the layers to the Map Categories window.

8. Map Categories

Once layers have been made available using the Layers button, you will see them as being available for selection.

- In the Map Categories window, click on the plus sign beside the Council and Democracy and Education and Learning Layer Groups



The available individual layers for the Layer Group are listed.








- Expand the **Education and Learning** Layer Group and then click on the small arrow beside the **Primary Schools** layer.

This displays the **Actions** available for the Layer (you can also do this for a Layer Group)

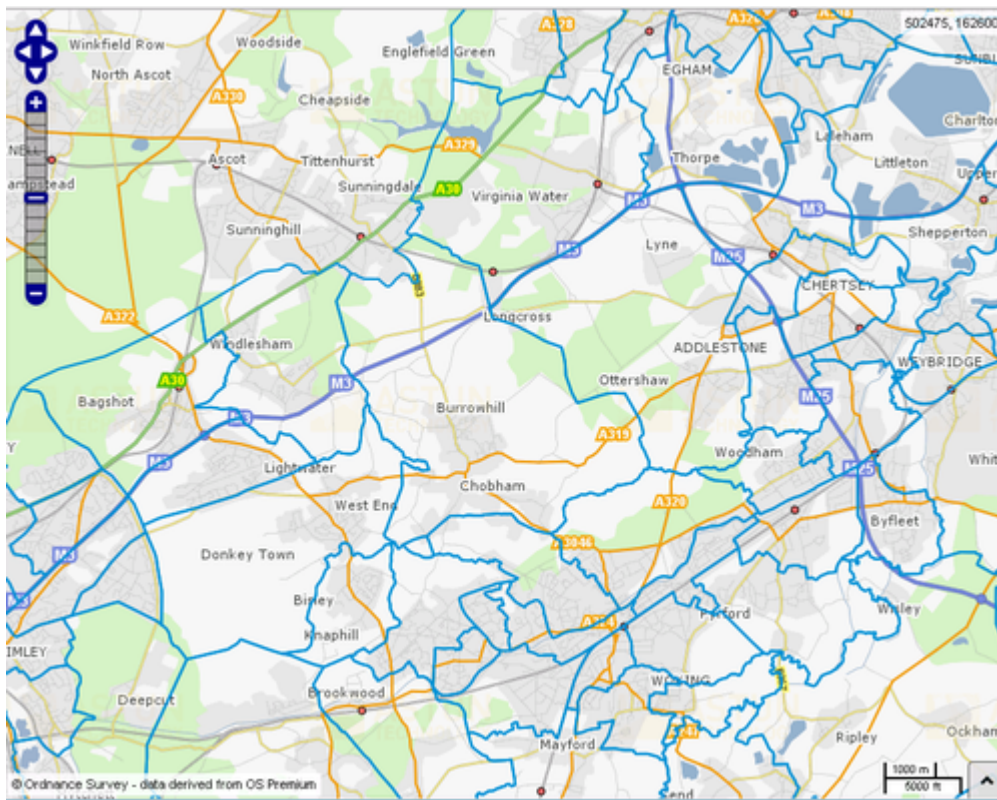
Primary Schools



Depending upon how the layer has been configured, you will see one or more of the following **Actions** icons:

	Remove Layer (or Layer Group) from list
	Check to show results for the layer (for example you may want to display the layer on the map but not return results when selecting or searching)
	Find Nearest (equivalent to using the Find > Find Nearest dialogue)
	Display the Metadata for the Layer
	Edit the Filters for a Layer
	Remove all filters from the Layer
	Edit the Features of the Layer

- Check the box beside the **Council and Democracy** Layer Group and zoom out a little



The Wards are displayed on the map with blue boundaries. Notice also that the Map Categories window now includes a legend for each displayed layer.

- Click on the map inside any one of the Ward boundaries.

Wards	
Name	
1	Lightwater Ward

The Ward name is displayed in the Information Browser.

- Check the box beside the **Education and Learning** Layer Group

All the schools layers are displayed on the map.

- Now click on one of the school icons

Primary Schools		Wards			
Name	Capacity	Type	Admissions	Gender	
1	Holy Trinity CofE Primary School	420	Primary	4-11 yrs	Mixed

The name and details of the school are shown in the Information Browser on the **Primary Schools** tab. In the **Wards** tab, the name of the Ward in which the school is located is now shown. This is because when you click on the map, all open layers are queried, and the results for each layer shown in that layer's tab.

9. The Information Browser

As you have seen, the Information Browser shows details of the features selected in the map. An explanation of of the different parts of the Information Browser window is below, with the numbers corresponding to the red number in the screenshot.

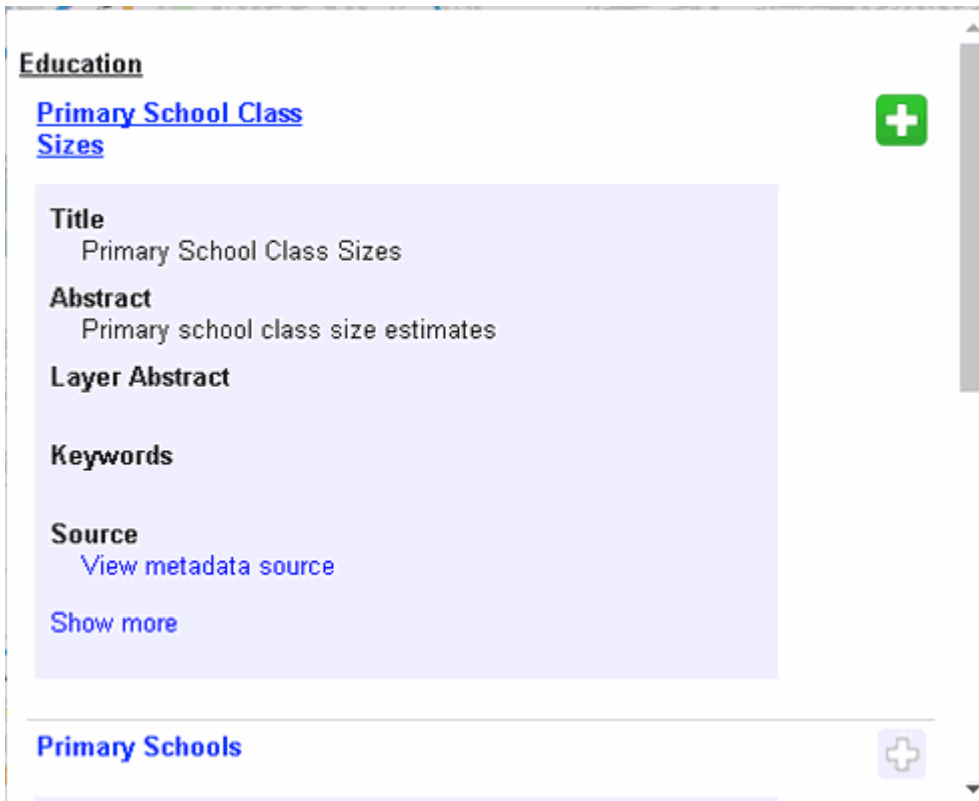
Special Schools	Independent Schools	Secondary Schools	Primary Schools	Wards	
				1	
				2	
Name	Capacity	Type	Admissions	Gender	
3	4	5	6	7	
1	Knaphill School	360	Primary	7-11 yrs	Mixed
2	The Knaphill Lower School	270	Primary	3-7 yrs	Mixed
3	Holy Trinity CofE Primary School	420	Primary	4-11 yrs	Mixed
4	Bisley CofE Primary School	420	Primary	4-11 yrs	Mixed
5	Valley End CofE Infant School	180	Primary	5-7 yrs	Mixed
6	St Lawrence CofE (Aided) Primary School	210	Primary	4-11 yrs	Mixed
5		6		8	
Filter		Showing 1 to 6 of 20		First Previous 1 2 3 Next Last	


1. The Tabs show the layers which included features in the defined selection area
2. The Show / Hide arrows open and close the Information Browser
3. The Popup No matches the number shown on the map for the feature
4. The Sort sequence button sorts the features by the column selected
5. The Save button allows you to save the data in the currently-displayed selected tab to either a Comma Separated Values (CSV) text file or Microsoft Excel (XLS) format
6. The Filter the layer with these results button allows you to create a Spatial Filter for the Layer with the results.
7. The Filter field allows you to filter the features in the current tab by entering a string, which searches all fields
8. The Pagination buttons allow you to navigate to more features if they are not all shown on the tabs

Note: You will be able to create filters using selected geographical areas further on in this workshop, when we use the **Select & Measure** tools.


10. Searching in iShare GIS

In the middle of the Application Bar you will see a **Search for layers** box. Enter "primary school" and click **Go**.



If the Layer is not currently being displayed in the **Map Categories** (or on the map) then you will see a green box with a plus . This means that you may click on the entry to add the Layer to the Map Categories and display it on the map.

If the plus is greyed out (see *Primary Schools in the screenshot*) then this Layer is already being displayed.

Profiles to which you have authority, but are not in the Profile currently being displayed, will show an arrow . This means that you can select to switch to this Profile and add the selected Layer to the map.

For **Layers** which have Metadata associated with them you will see a **Show more** link. Click on the link to display the additional metadata. Click on the **Hide more** link to display less information.

Primary Schools

Title
Primary Schools

Abstract
Data generated from Edubase via ADS.

Layer Abstract

Keywords

Source
[View metadata source](#)

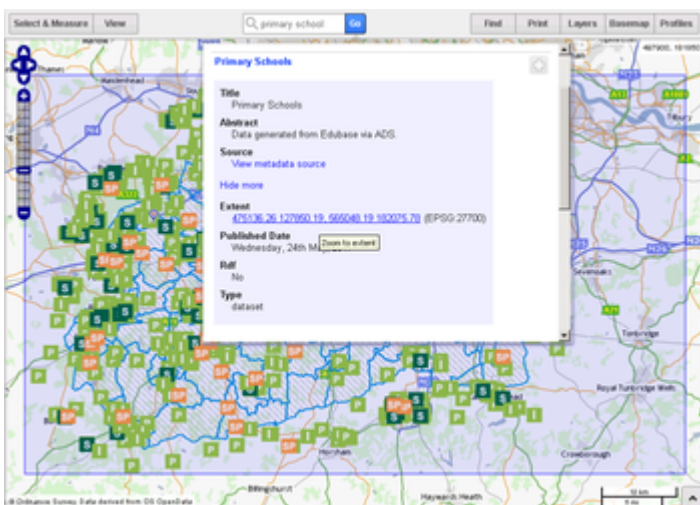
[Hide more](#)

Extent
7333305.69 -5695806.60, 7417730.53 -5457911.02
(EPSG:27700)

Published Date
Wednesday, 27th September, 2017 11:0pm

Rdf
Nn

If you click on the **Extent** link it will zoom the map to these extents e.g.



If the Metadata has come from GeoNetwork then you will see a **View metadata source** link, which when clicked on, will take you to the **GeoNetwork**.

11. The Print button

The Print button will print your current map, either as a PDF file or as an image.

First prepare the map that you wish to print.

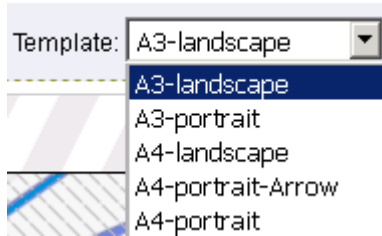
- From the **Basemap** button select the **OS OpenData** option.
- Hold down the Shift key and click and drag with the mouse to draw a marquee select area around our selected address (GU18 5QR), then click and drag to move the map so that our address is near the centre of the map.

11.1. Printing to PDF

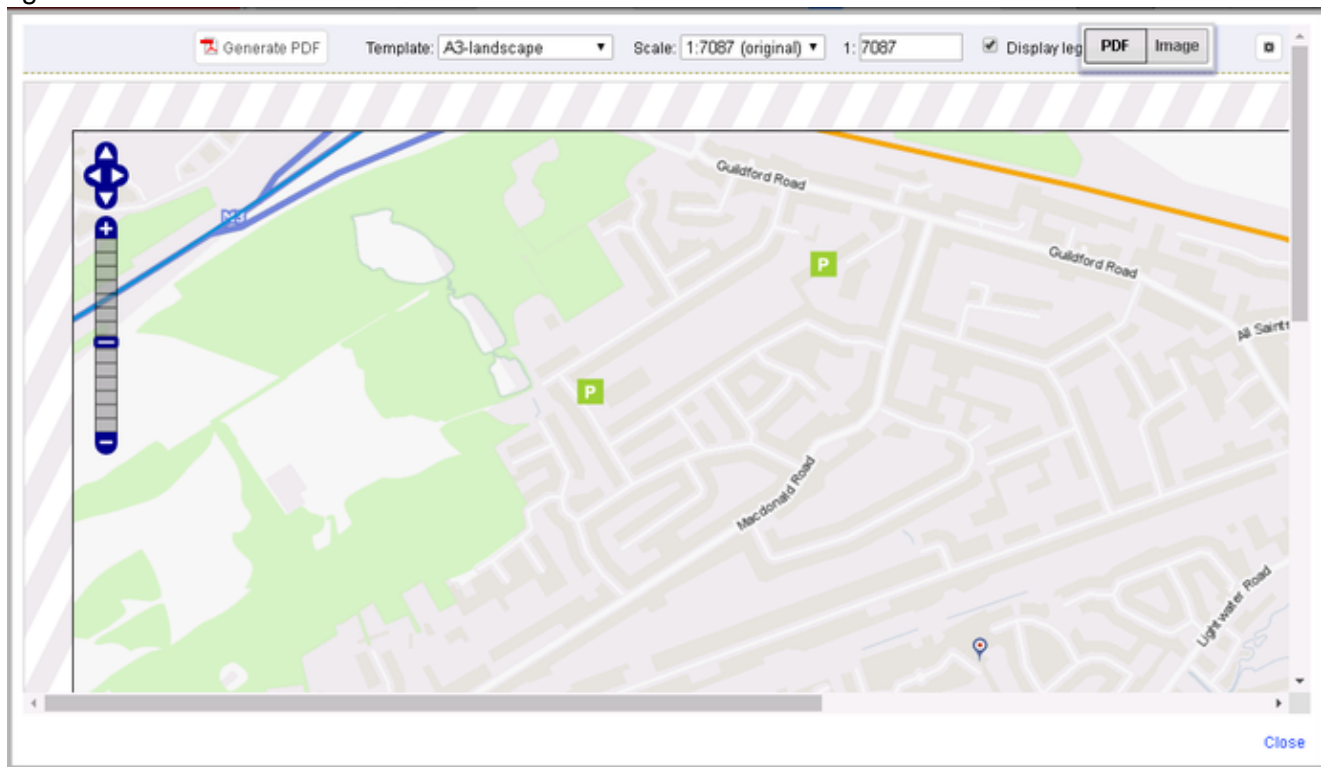
- Now select **Print > PDF** from the Application Bar.


At the top of the window you can:

- Select from the list of available print Templates e.g. **A3-landscape**



- Change the scale of the map by using the **Scale** dropdown or entering the scale in the field to the right of it



- Select if you wish to include the Legend by ticking **Display legend?**
- Change the **Page Setup** by clicking on the  icon at the top right of the window

Page size:
A3 (297mm x 420mm)

Page orientation:
landscape

Top margin (10 mm) :
[Slider]

Right margin (10 mm) :
[Slider]

Bottom margin (10 mm) :
[Slider]

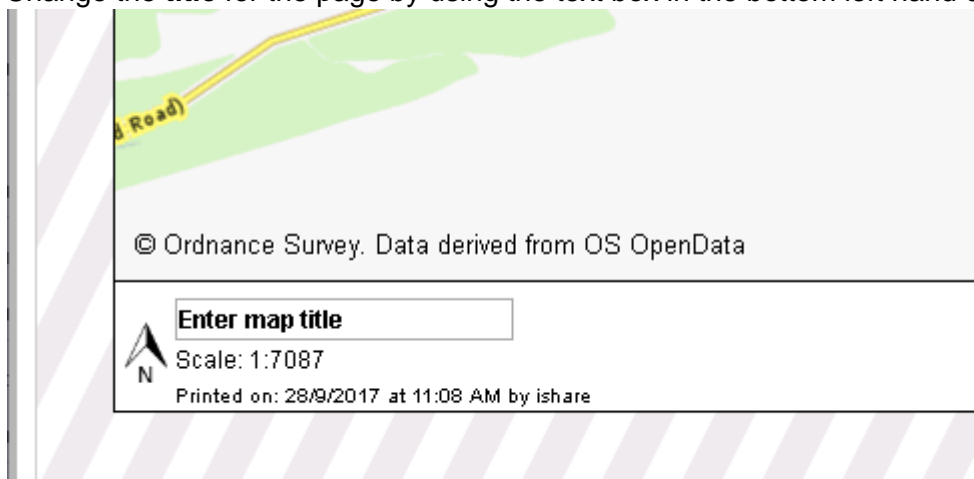
Left margin (10 mm) :
[Slider]

In the map itself, you can:

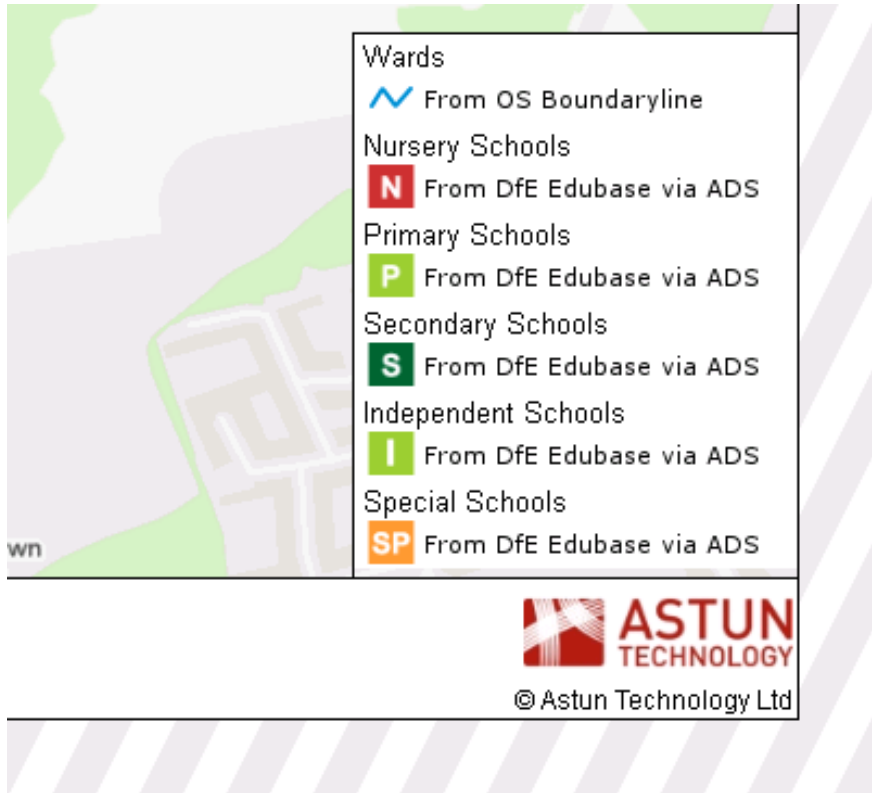
- Use the **Navigation Tool** to zoom in or out, or pan to a different area of the map
- Use the mouse to navigate the map in the same way as you would in the main iShare interface

At the bottom of the window you can:

- Change the **title** for the page by using the text box in the bottom left hand corner



- See the **legend** for the currently displayed layers in the bottom right hand corner



- When you are happy with your layout, click the **Generate PDF** button at the top of the window
- Click **Close** on the Print window - bottom right.

For instructions on creating your own print template, refer to the [Creating your own Print Template](#) topic in the iShare online help.

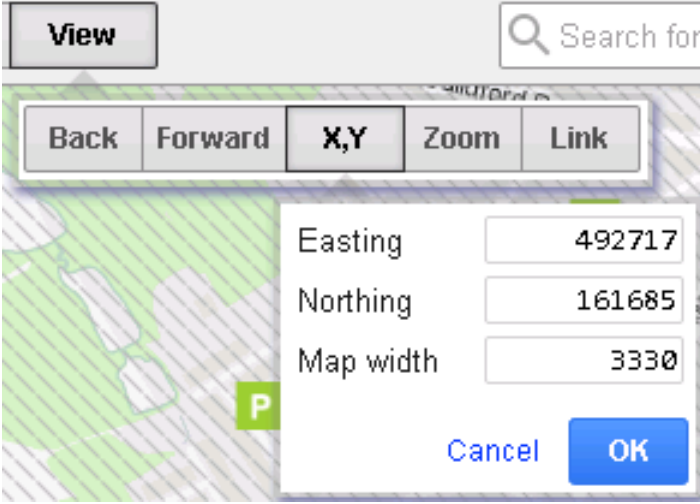
11.2. Printing to Image

- Select **Print > Image** from the Application Bar
- Right-click on the image and **Save Image As...**
- Select a location and name for the image and click **Save**
- Close the window

12. The View button

The **View** button allows you to change the view of the map displayed in the window. The options are explained in the table below. Have a play with each of the buttons.

Back	This navigates back through your view history.
Forward	Goes to the the later view of the map. This is only available if you have previously clicked Back

X,Y	<p>Displays a dialogue window allowing you to set the Easting, Northing and Map Width</p> 
Zoom	<p>Turns on 'marquee zoom': click and drag a zoom box to the area you want to see in the map (you can also adjust the zoom by clicking the + / - keys on the keyboard, using a mouse wheel, or using the navigation tool).</p>
Link	<p>Select this to display a Link for the current map. Now you may Copy the URL to pass on to someone else to open iShare GIS with the same map Layers, Zoom level, map centre etc.</p>

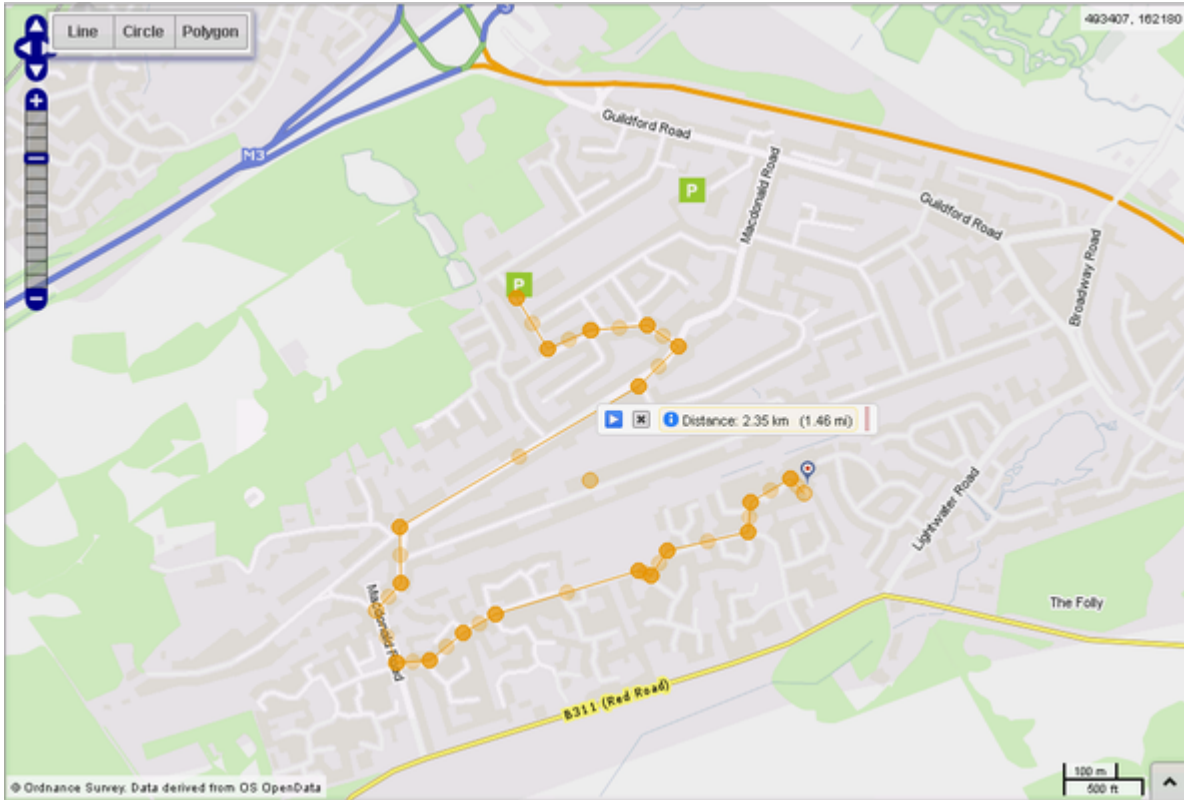
13. Measuring

13.1. Measuring a distance

- Click on **Select & Measure > Line** in the Application Bar.
- Click once on the start location of the distance you want to measure.
- Click on any intermediate points on the track to be measured. Alternatively you can hold down the **Shift** Key then, holding down the left mouse button, move the mouse to freehand draw your Line.
- Double-click on the finish point.

The distance will be displayed in a tooltip in metres and feet as you click, and when you double-click to finish.

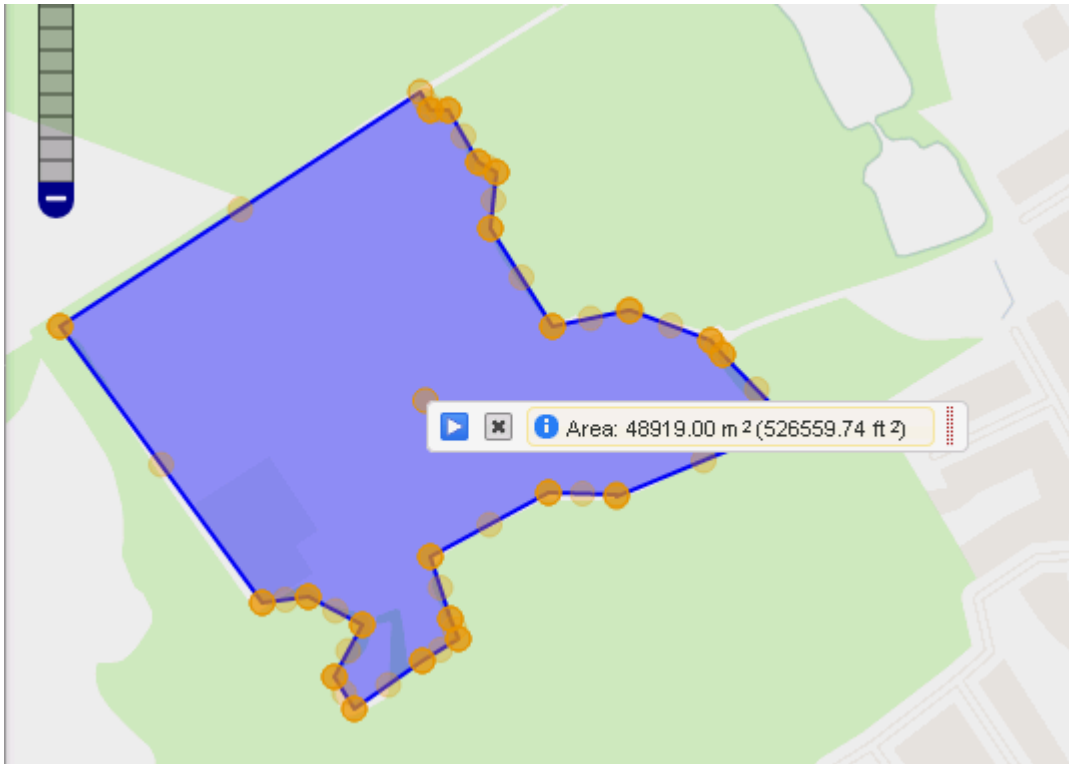
- If you are unhappy with the positioning of any of the nodes, drag them with the mouse to move them and the distance will be re-calculated.
- Add nodes by selecting and dragging the lighter nodes which appear between the main nodes.
- You can move the entire line by selecting the 'centre' node which appears off the line, and dragging it to another location.



- Click on the Delete button [x] (or on another Select & Measure option to start a new measurement) to remove the distance results from the map.

13.2. Calculating an area

- Click on **Select & Measure > Polygon** in the Application Bar.
- Click points on the map to build an enclosed area (for example the four corners of a house), and double-click to finish. Alternatively you can hold down the **Shift** Key then, holding down the left mouse button, move the mouse to freehand draw your Polygon.
- As with the line tool, you can move nodes, add new nodes and move the entire polygon.



- Click on the Delete button [x] (or start a new area) to remove the area from the map.

14. Making a spatial selection

The **Select & Measure** tool allows you to select features from the map to be displayed in the **Information Browser** window by drawing Lines, Circles or Polygons. The results can be filtered and exported in the usual way. Note that these tools will select all features from all visible selectable layers, so ensure that only those which you are interested in are turned on.

14.1. Using the Circle tool

Let's go back to the Default profile.

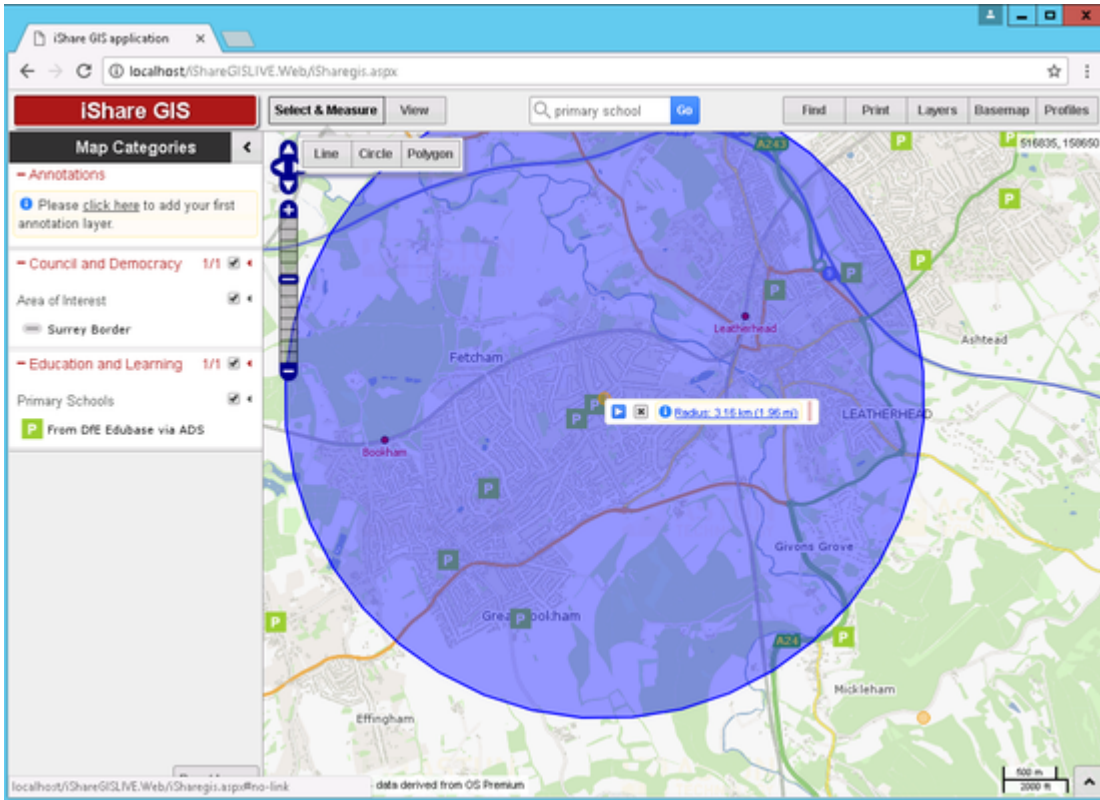
- Select **Default** from the **Profiles** button.


The available Layer Groups and layers in the Map Categories window changes.

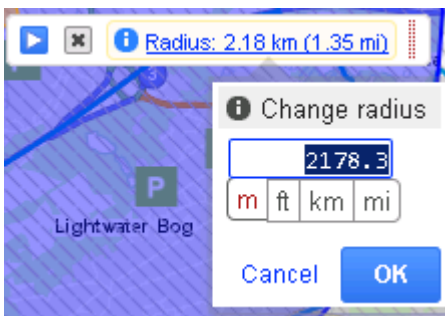
- Now turn on the Education and Learning and Council and Democracy Layer Groups by clicking in the box beside the relevant Layer Group in the Map Categories window.


The layers will be displayed in the map window.

- Zoom out the map until you can see several schools displayed.
- Click **Select & Measure** > **Circle**, then click and drag on the map create a circle, starting where you want middle to be, until the circle is the radius that you require, then let go of the mouse button.



- To manually set the radius of the circle, click on the link in the info box which displays the radius (if the link is not showing, click on the small information icon ).



- To move the circle, click and drag on the node at the middle of the circle.
- To show the features within your circle in the Information Browser, click on the **Play** button  in the info box.

	Special Schools	Independent Schools	Secondary Schools	Primary Schools	Wards	
#	Name	Capacity	Type	Admissions	Gender	
1	Bagshot Infant School	187	Primary	5-7 yrs	Mixed	
2	Lorraine School	90	Primary	2-7 yrs	Mixed	
3	Heather Ridge Infant School	180	Primary	5-7 yrs	Mixed	
4	Prior Heath Infant School	180	Primary	5-7 yrs	Mixed	
5	Crawley Ridge Infant School	180	Primary	5-7 yrs	Mixed	
6	Pine Ridge Infant and Nursery School	108	Primary	2-7 yrs	Mixed	



Filter Showing 1 to 6 of 12 First Previous 1 2 Next Last

- You can filter your results further in the usual way by using the box at the bottom of the Information Browser

Special Schools		Independent Schools		Secondary Schools		Primary Schools		Wards	
Name	Capacity	Type	Admissions	Gender					
1 Bagshot Infant School	187	Primary	5-7 yrs	Mixed					

bagshot Showing 1 to 1 of 1

First Previous 1 Next Last

- To export your results, click the **Save** icon, pick your preferred output (CSV or Excel), and click **OK**.
- If the Layer is an OGC Layer then a "Filter the layer with these results" button  will also be displayed. Click on the button and this will automatically create a **Spatial Filter** for the layer.
- Delete your selection by clicking on the .

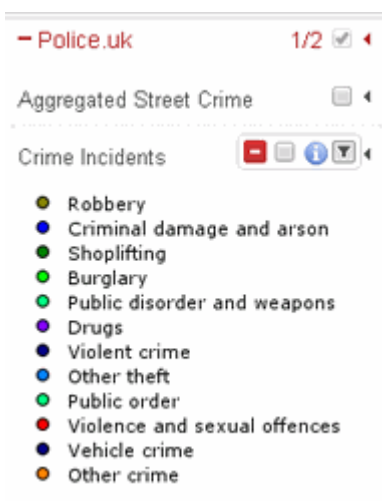
14.2. Using the Polygon tool

Create an area for selection in a similar way to the way you did when measuring an area, using **Select & Measure > Polygon** to draw a polygon on the map, double-clicking to finish. The same functions will be available as for **Circle > Select**.

- Draw a polygon, and display the results as you did for the previous exercise.
- When you have finished, delete your selection by clicking on the x.

15. Filtering Features in a Layer

Standard Layers (OGC not Classic) can be filtered by the user to show only a subset of the features. In this example we will filter the **Street Crimes** layer so that only certain crimes are shown. The layer can be found in the **Police.uk** Layer Group in the **Default** profile. We will filter on the Crime Incidents layer by crime type so that we display only "Vehicle crime".



Use the **Edit Filters** tool to bring up the filter dialog.

- Police.uk 1/2 ◀
 Aggregated Street Crime ◀
 Crime Incidents ◀
 ● Robbery

Click **Add condition** and then select the Field, comparison type and the required criteria:

Queries for Crime Incidents

Filters

Crime Type ▼

is like ▼

Vehicle

-

[Add condition](#) +

The map window is redrawn to reflect the filtered view. Inspect a few of the objects by info click or select by area.

You will notice that the Crime Incidents layer is now underlined with a dotted line. This is to show that this layer has been filtered. If you hover over the Layer name the filter will be displayed e.g.

- Police.uk 1/2 ◀
 Aggregated Street Crime ◀

 Crime Incidents ◀
 ● Robbery
Filters: crime_type is like "Vehicle".
 ● Criminal damage and arson
 ● Shoplifting

16. Annotation Layers

Sometimes referred to as 'red lining', this enables users to annotate a map with lines, polygons, points and text. The annotations are stored by iShare GIS and are displayed in their own layer over the top of all others. This annotation layer is persistent; if the user loads iShare GIS at a different time or in a different browser, then all annotations previously created will be visible.

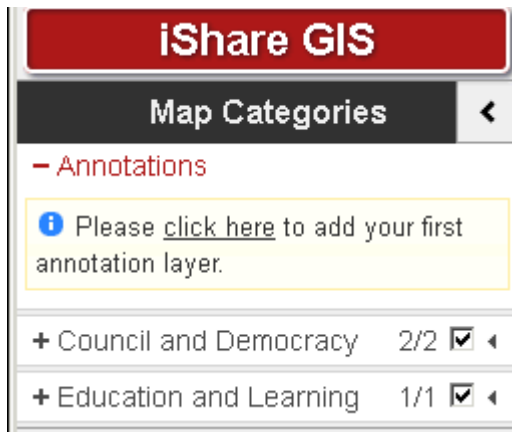
Layer annotations require a user be authenticated. This is so that the annotation can be stored by iShare GIS against the user's authenticated name. Annotations are not stored in cookies, and if the user is unauthenticated (i.e. the web application is being used anonymously) then the annotations will not be available.

Users can create different annotation layers, and choose to keep them private or share them with other users.

Any annotation layers that you have created, or to which you have been given permission, will be displayed in Map Categories and the Layer Catalogue.

16.1. Create a New Annotation Layer

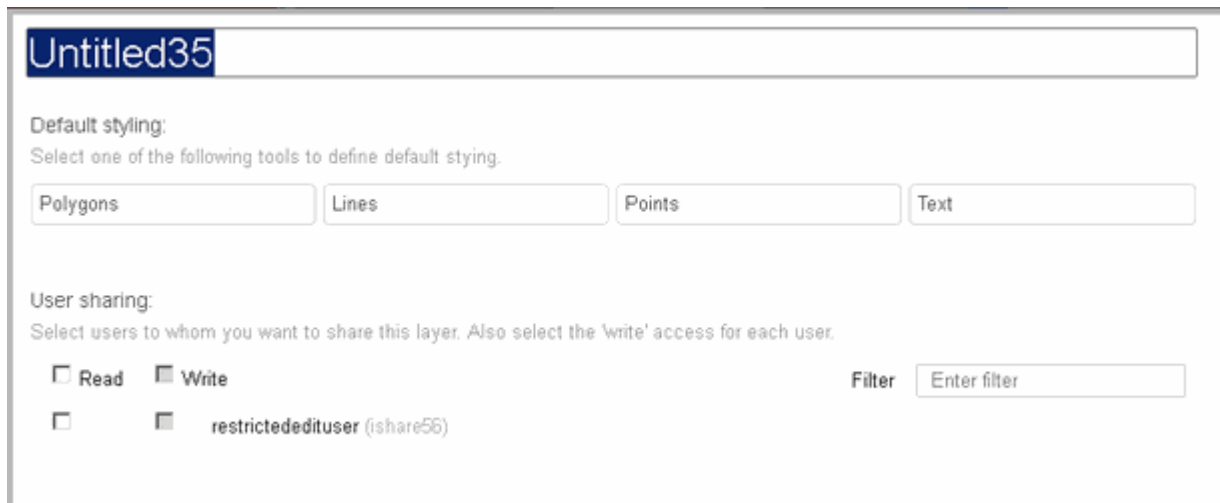
If you have not created any annotation layers, or none have been shared for your use, there will be a message under Annotations with a link to adding your first layer.



Once you have added an Annotation layer then you can use the [New layer](#) link to create any further layers.



- Click on the [click here](#) link to add your first annotation layer.

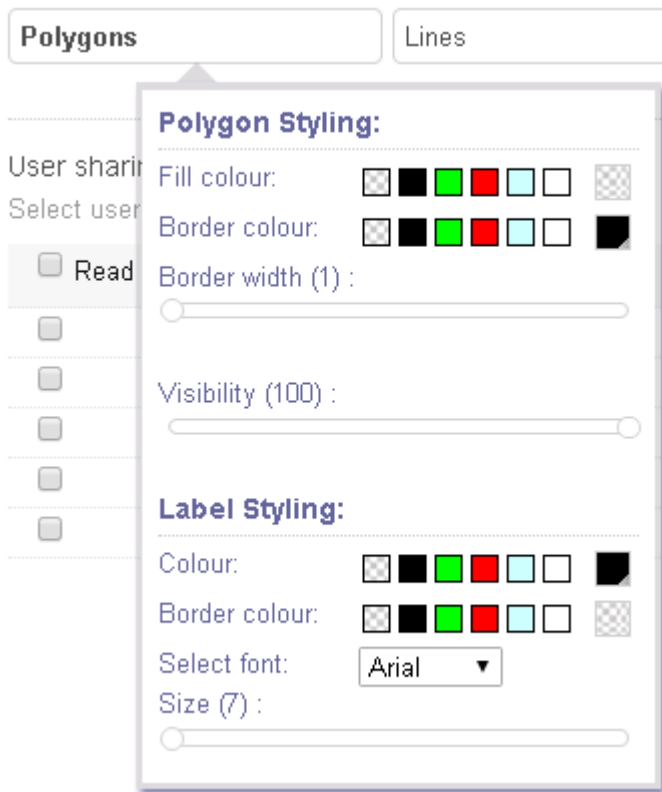


The properties dialogue for the new layer is displayed.

- Give the annotation layer a Name by typing in the box at the top.

Now define the default styling for each geometry type you are going to be using in your layer. It is quicker to do this before adding layers, otherwise the default styling will be used.

- Click on the **Polygons** button.



- Pick the defaults that you would like to use for any polygons in your annotation layer.
- For colours, either pick a colour from one of the preset colours, or click on the right-hand entry for a larger selection or hex specification.

The colour you have chosen will be shown on the right.

- Where there is a slider control, drag it to change the value.
- When you have finished, click outside the dialogue to close it.
- Now do the same with Lines, Points and Text. For points, you can pick from a number of preset symbols.

The **Properties** dialogue also allow you to define user sharing for your annotation layer. You can choose whether you want users to view (**Read**) the layer, or to edit (**Write**) the layer as well.

To give all the users in the list permissions, check the boxes beside the words **Read** and **Write**. To give selected users permission, check the boxes beside individual users.

Note: You will not be able to tick the **Write** box unless you have ticked the **Read** box.

- Decide what permissions you wish to set for your layer.
- Once you are happy with the properties you have set, click OK to update (or click Cancel to return without updating).

To return to the properties dialogue, click on the **Actions** button (the triangle to the right of the name) for

your layer  and click  to display the dialogue.







To delete the layer, click  from the Actions button.


16.2. Adding Features to your Annotation Layer

Once you have set the defaults for your new annotation layer, you can add the required features. This is done by selecting the appropriate tool from the toolbar.



The tools are as follows:

	Draw a line
	Draw a polygon
	Draw a circle
	Add a point
	Add text
	Select an existing feature from the Layer

- Select  to add a **Line** feature.
- Click on the map to start the line, then move the mouse and click to change direction, double-clicking to finish.

The editing toolbar will be displayed for you to save, name, and define the properties of the line. Note that the line will by default have the properties defined in the previous step.



- For now, give your line feature a Name and click the **Save** icon.
- Now add a Polygon. Select the Polygon button and click on the map to set the first node, then keep clicking define the shape, double-clicking to finish.

Once again the editing toolbar will be displayed.

- Give the polygon a Name and click **Save**.
- Add a Circle feature and some Points.
- Select the Text button, and click where you want the text to appear.

A line will appear, which you can reshape as you would a line feature - this means that your text can be curved, or follow an existing feature such as a road.

- Add text in the box in the editing toolbar, then click **Save**.

16.3. Editing Annotation Features

To change the properties, shape, or position of an annotation feature, select it using the Select tool from the toolbar.

- Select the feature that you wish to edit.

The editing toolbar will be displayed, where you can change the name of the feature, delete it, or change the styling.

To reshape a feature, hover over a node and drag it to a new location. To move the entire feature, hover over the centre node and drag it.

- Have a go at reshaping your feature, and changing some of its properties.