

C-ISG-SDW-A.56 Managing iShare GIS 5.6 and SDW

An Astun Technology iShare Course

Code	C-ISG-A
Title	Managing iShare GIS
Description	Covers all aspects of iShare GIS administration.
Required Software	iShare GIS 5.6.0
Target Audience	iShare Administrators
Pre-requisites	None
Duration	1 day
Version	1.0
Updated	04 Jul 2017
Updated by	Antony Scott
Status	Complete

Introduction

This course is designed to introduce administrators to iShare GIS, including:

- an overview of the application and its architecture
- management and administration tasks
- troubleshooting and debugging

Prerequisites

Delegates should have:

- access to an installed and configured instance of iShare GIS
- access to the Astun training instance

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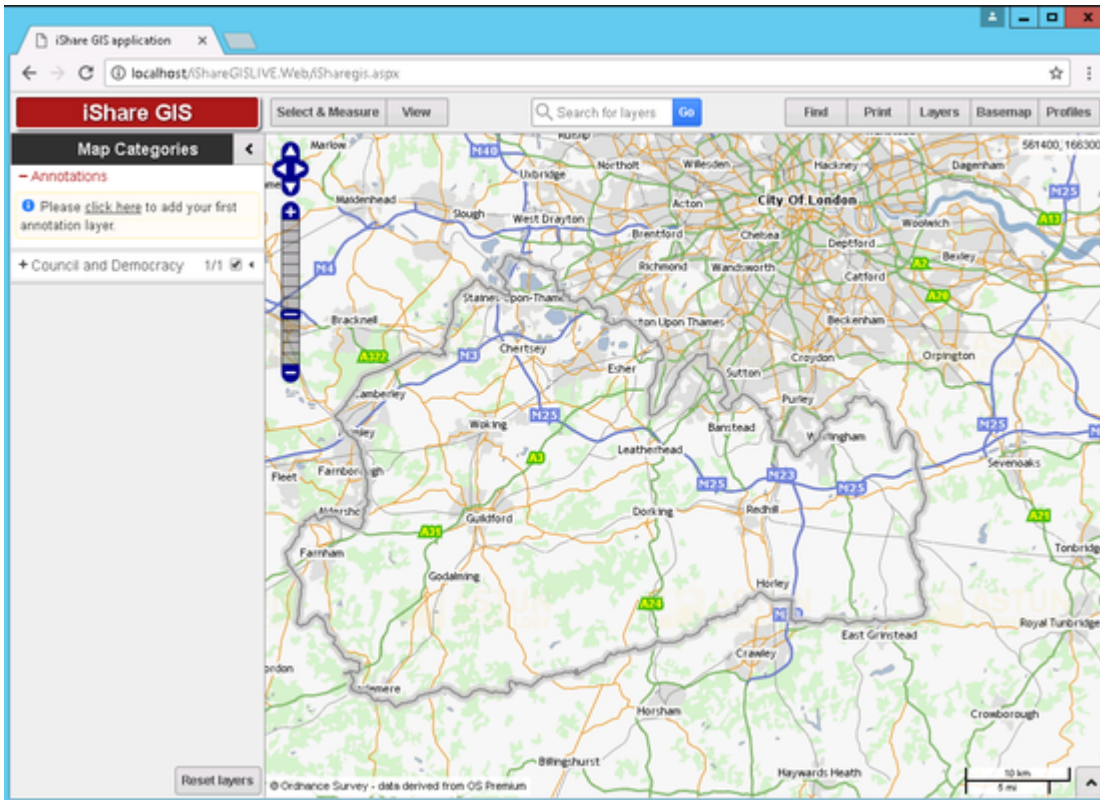
An Astun Technology iShare Training Module

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

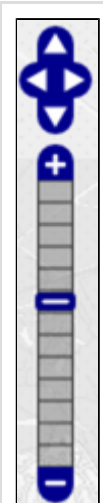
This module is aimed at end users of iShare GIS. It will demonstrate what you can see and do within the iShare GIS web application.

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



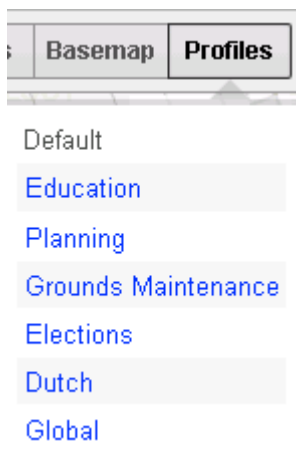
The buttons on the Application Bar allow the map tools that are frequently used to be shown all the time. Click on a button to display a quick dialog, such as a drop-down selection with further buttons or links, or a full dialog for entering or selecting details.

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

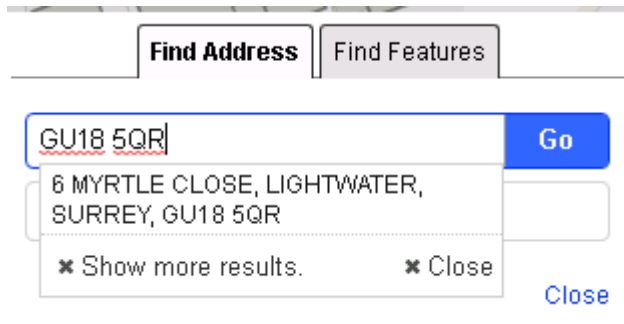
The **Find** button will normally have a **Find Address** tab, and a **Find Nearest** or **Find Features** if these options have been configured.

5.1. Using Find Address

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

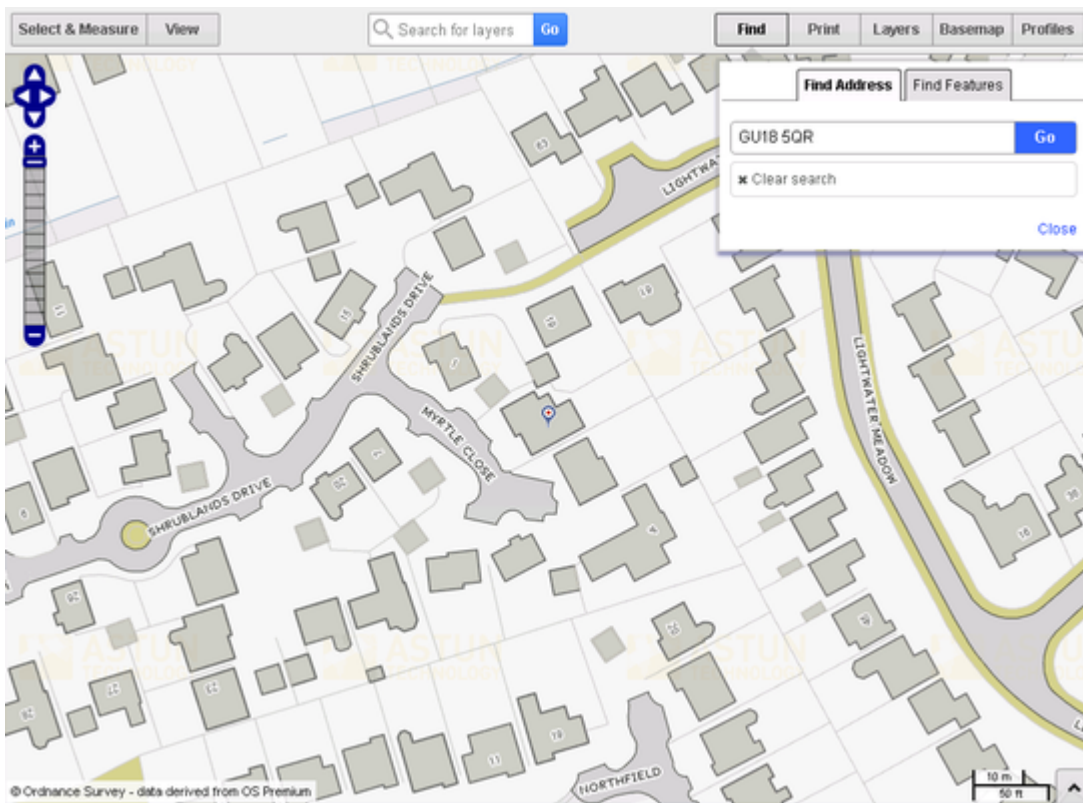


- With the **Find Address** tab selected enter “GU18 5QR” into the box and click **Go**.



Here you can see that one result has been returned.

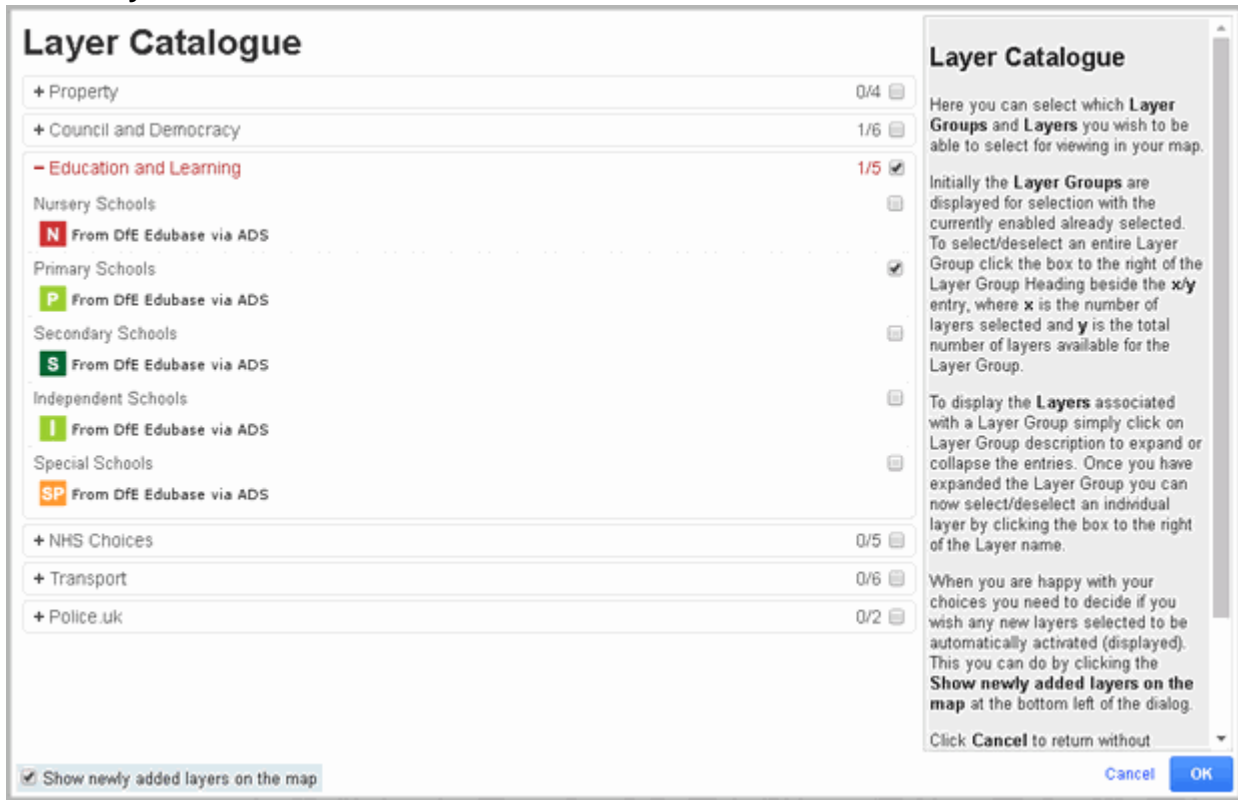
- Select the entry, and the map will zoom to the address, which will be highlighted with a pin; you will also find that it zooms in as shown in the following screenshot.



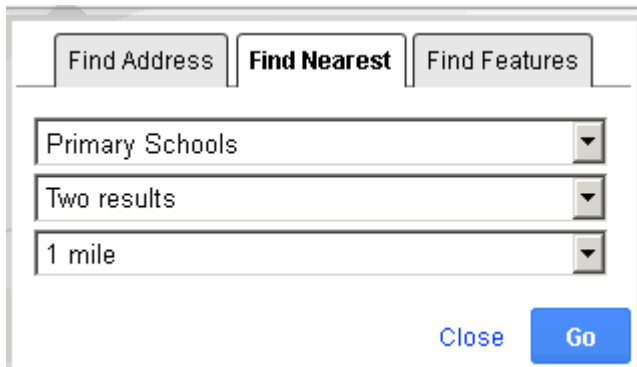
5.2. Using Find Nearest

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**

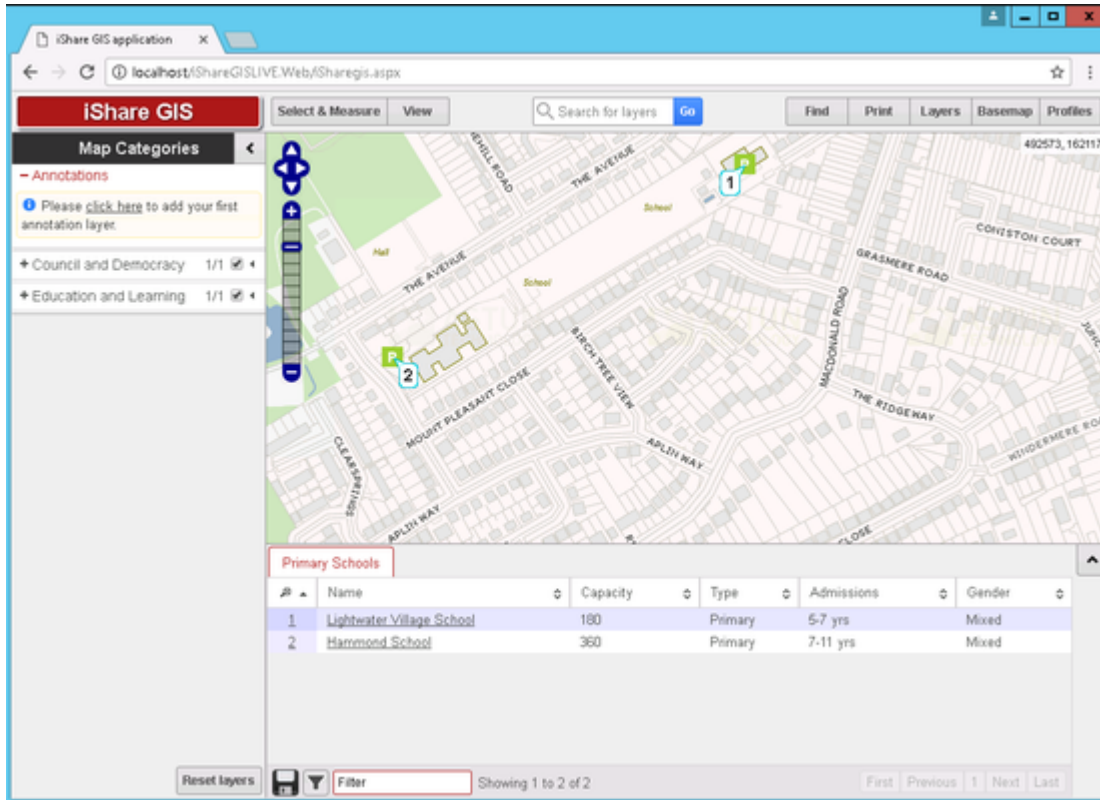


- Expand the **Education and Learning** entry and tick the box to display **Primary Schools**. Also tick the box **Show newly added layers on the map** and then click **OK**.
- Select the **Find > Find Nearest** tab.



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.

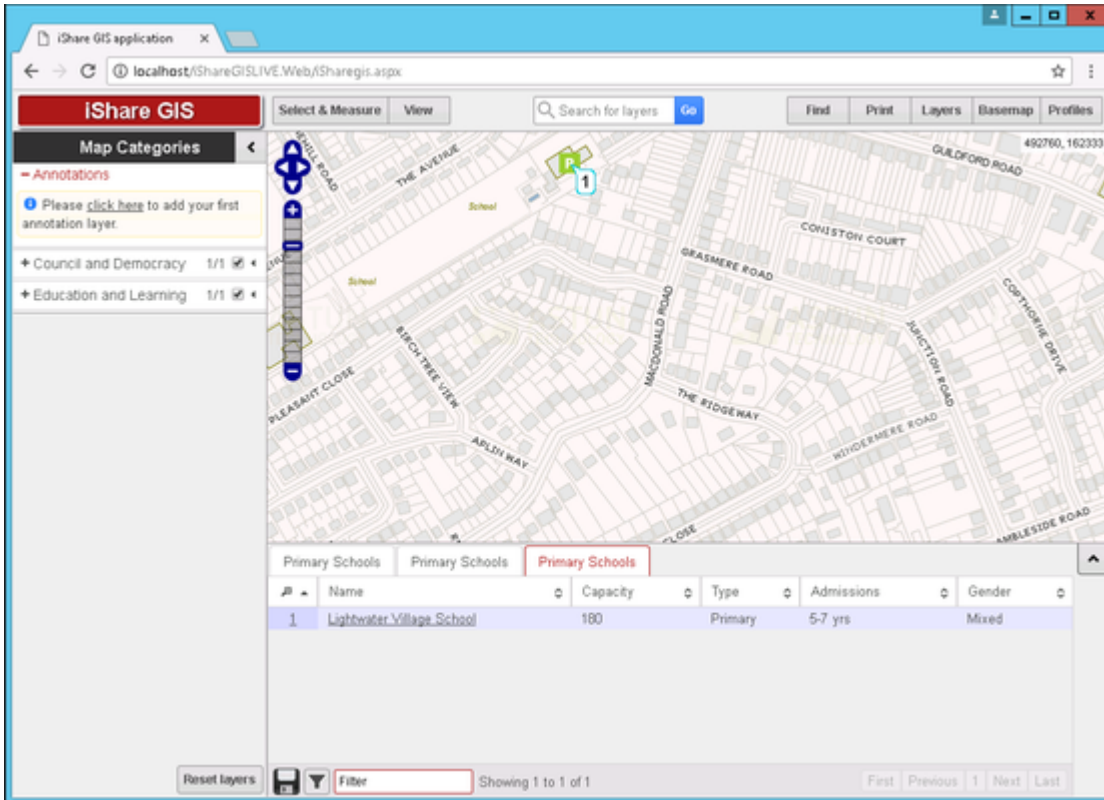
- To clear your results click the **Clear search results** button on the **Find Nearest** dialog.

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.

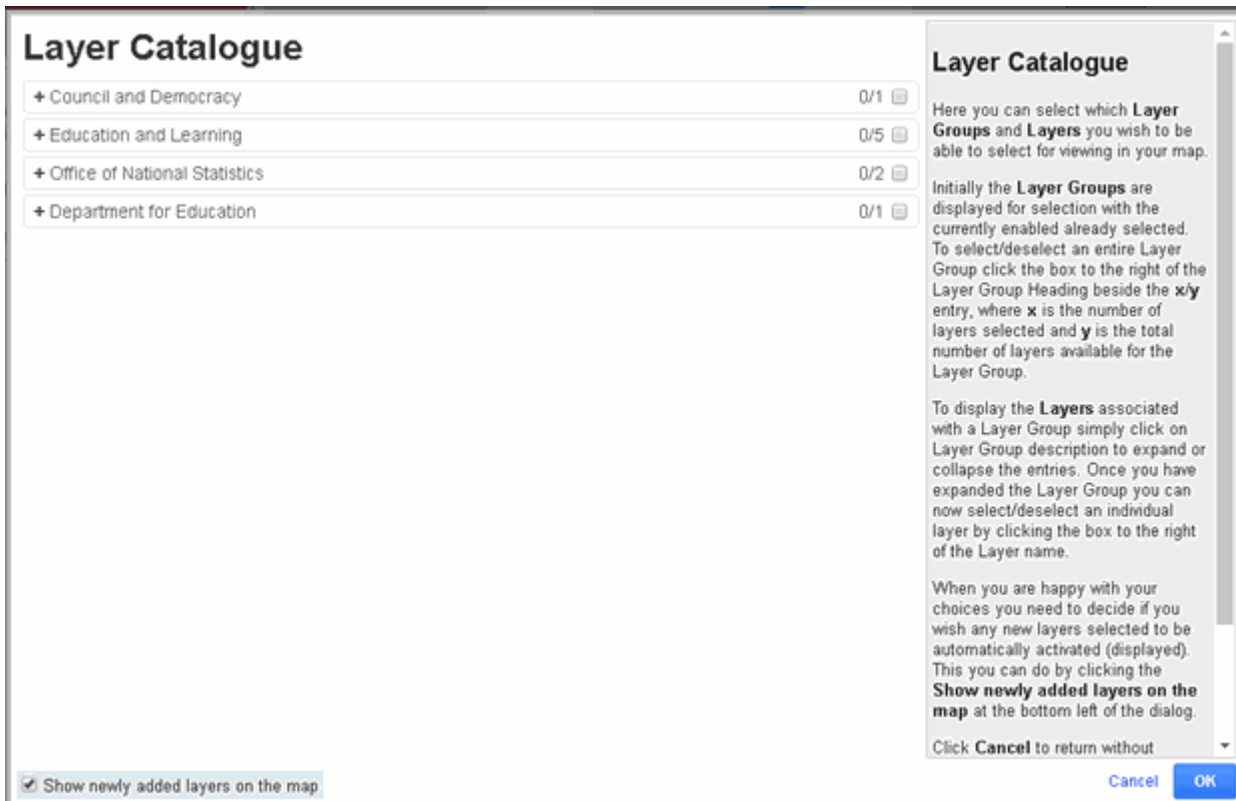
7. The Layers button

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.

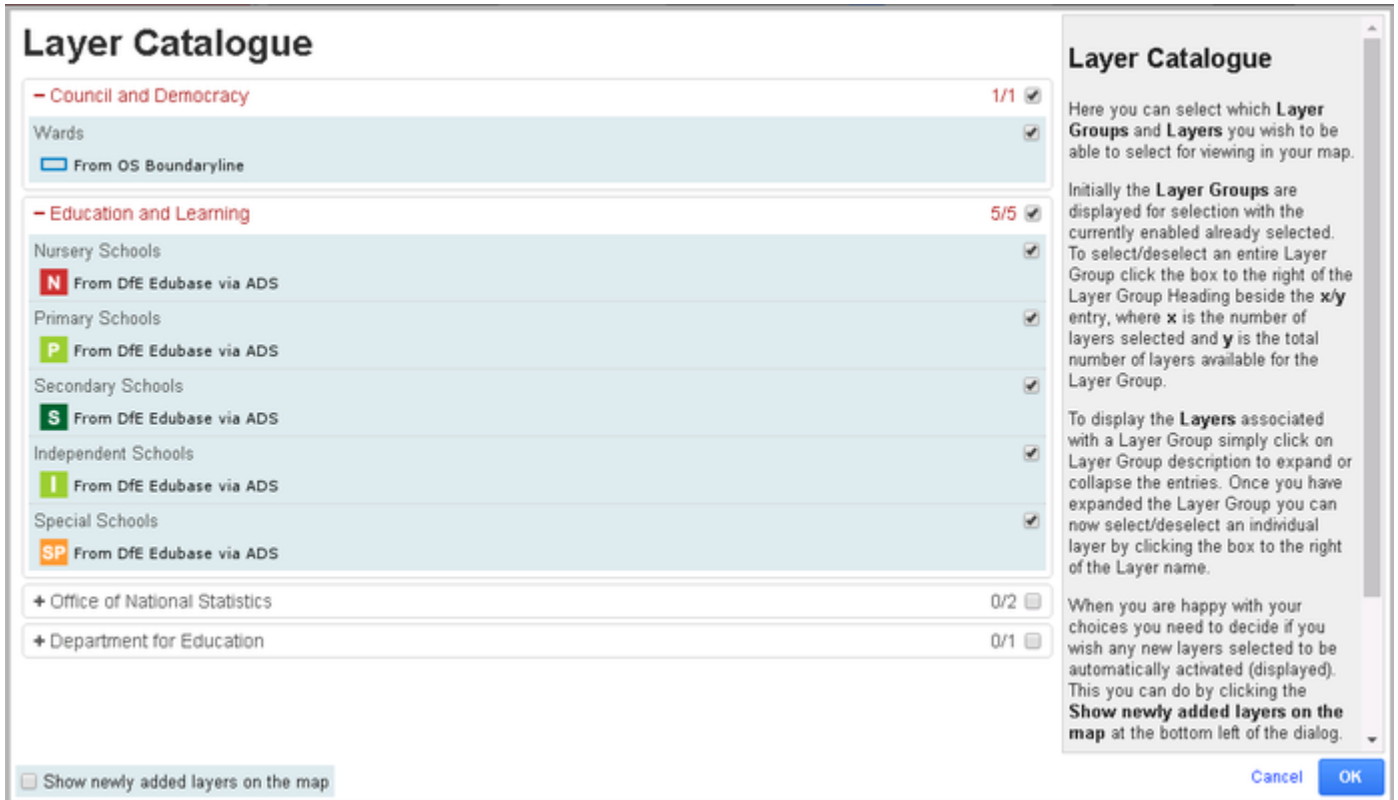


- Click on the plus sign beside the Layer Groups **Council and Democracy** and **Education and Learning**.

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.



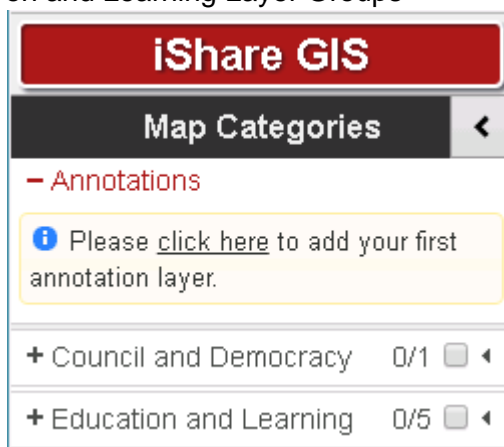
If you want the newly added layers to be displayed on the map, click the **Show newly added layers on the map** check box at the bottom left of the dialogue.

- 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)

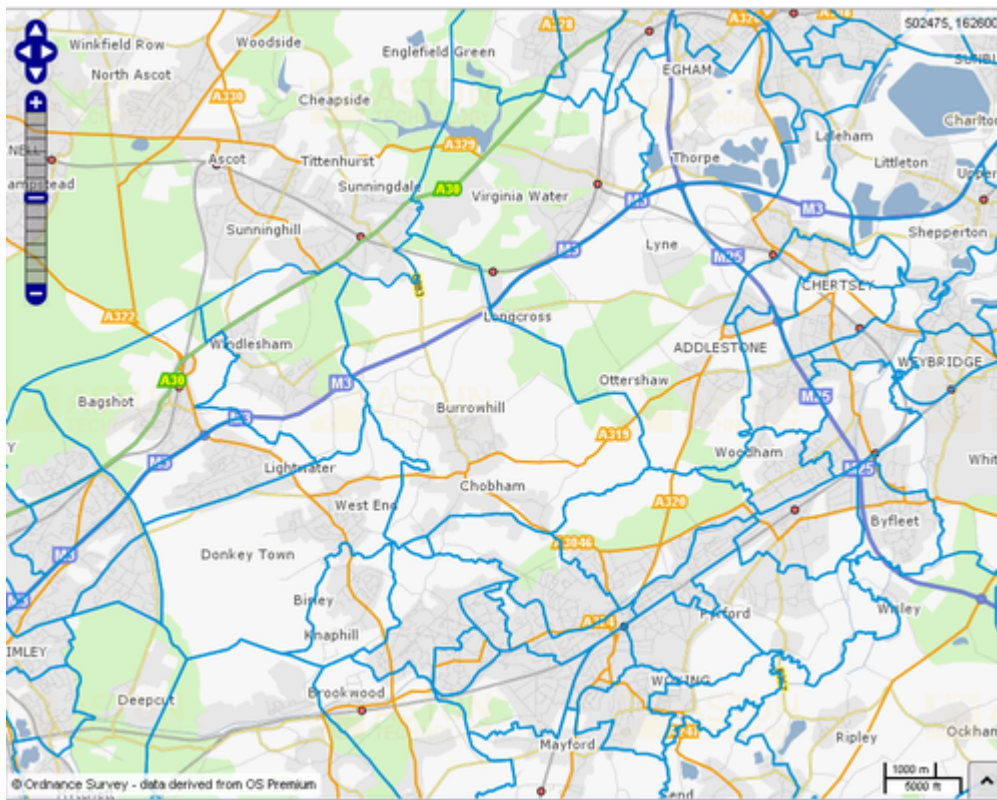
Primary Schools



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	
Name	Capacity	Type	Admissions	Gender					
3	1	Knaphill School	360	Primary	7-11 yrs	Mixed			
2	2	The Knaphill Lower School	270	Primary	3-7 yrs	Mixed			
3	3	Holy Trinity CofE Primary School	420	Primary	4-11 yrs	Mixed			
4	4	Bisley CofE Primary School	420	Primary	4-11 yrs	Mixed			
5	5	Valley End CofE Infant School	180	Primary	5-7 yrs	Mixed			
6	6	St Lawrence CofE (Aided) Primary School	210	Primary	4-11 yrs	Mixed			

5 6

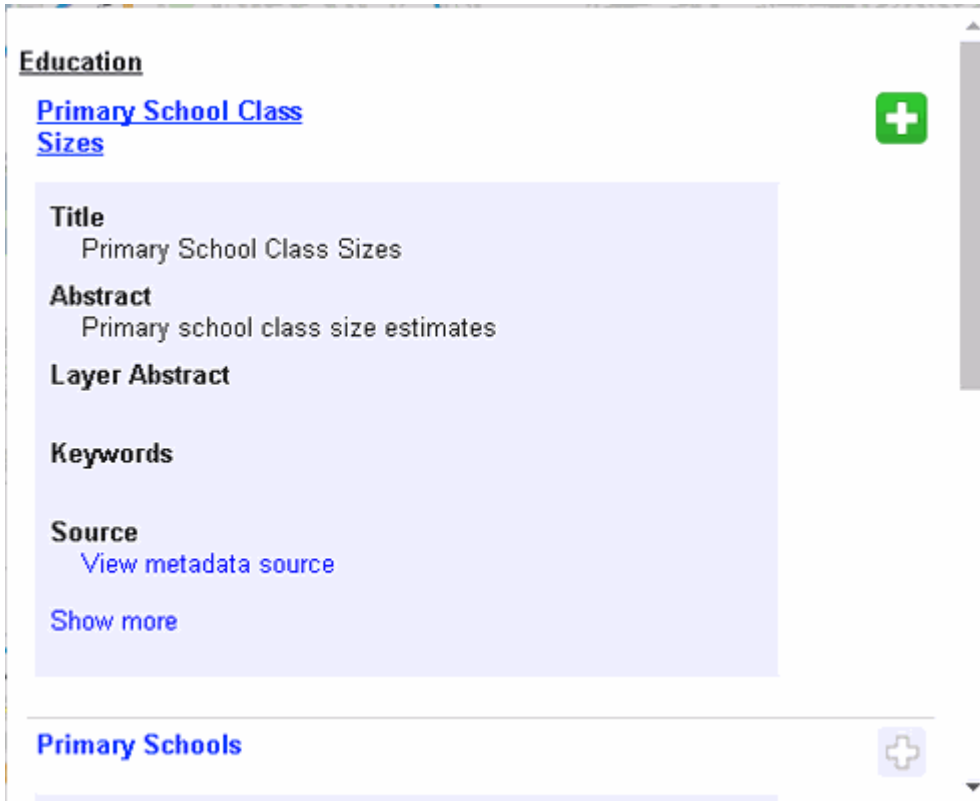
Filter 7 Showing 1 to 6 of 20 8 First Previous 1 2 3 Next Last


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** that have external 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. Click the grey menu bar to dismiss the search dialogue.

Primary Schools

Title
Primary Schools

Abstract
Data generated from Edubase via ADS.

Layer Abstract

Keywords

Source
[View metadata source](#)

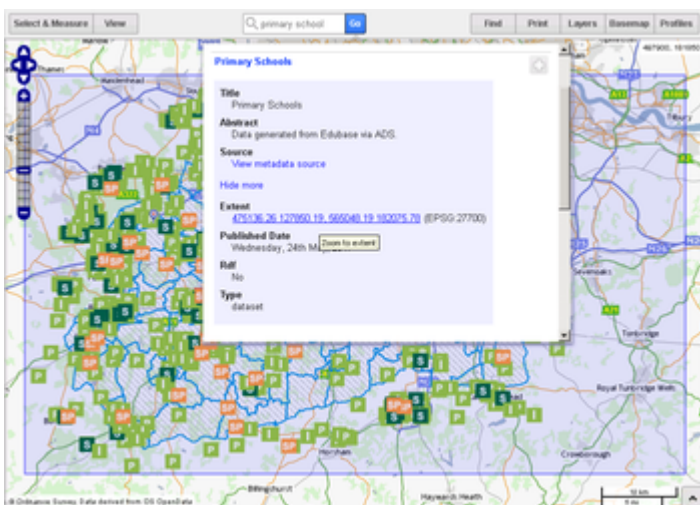
[Hide more](#)

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.

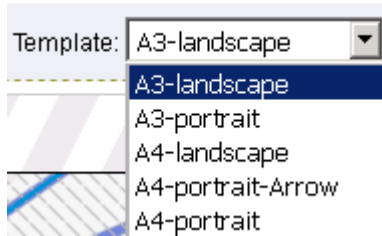
- From the **Basemap** button select the **OS OpenData** option.
- Hold down the Shift key and click and drag with the mouse to draw a marquee select area around our selected address (GU18 5QR), then click and drag to move the map so that our address is near the centre of the map.

11.1. Printing to PDF

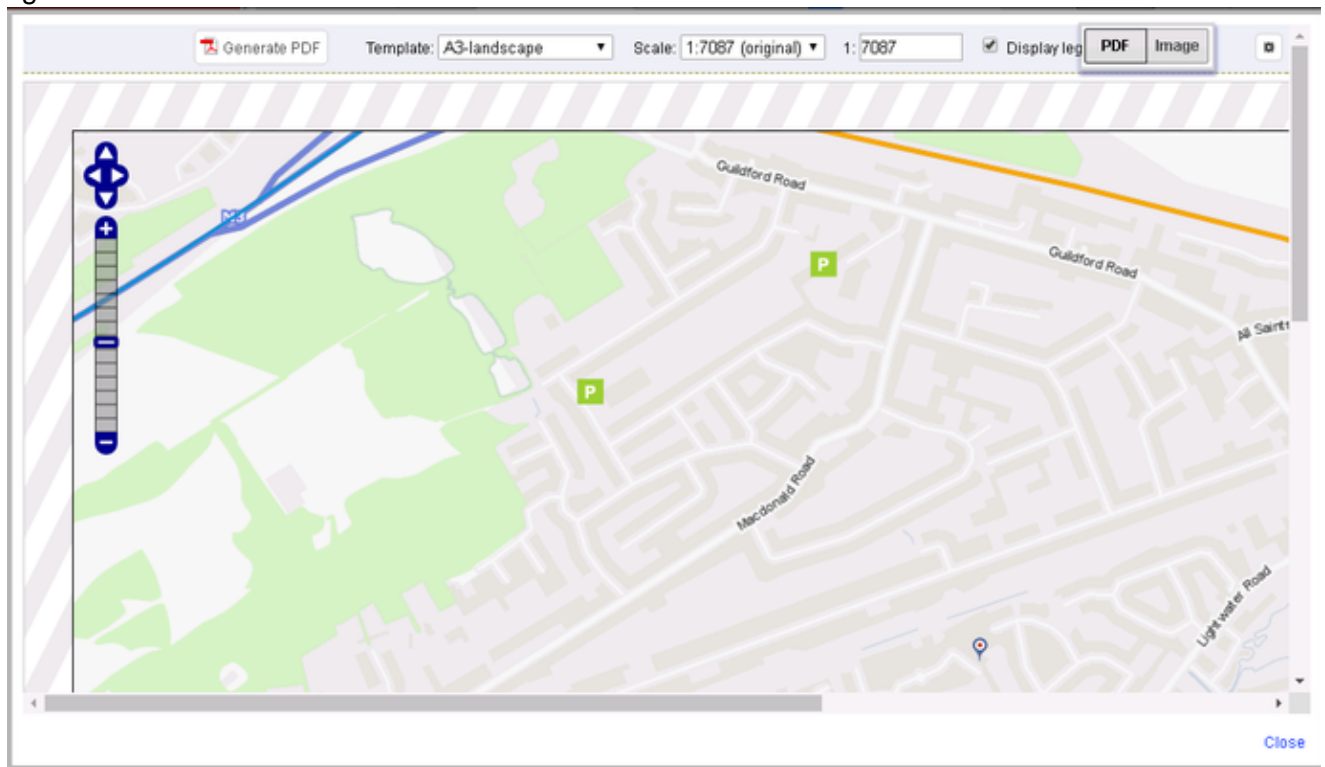
- Now select **Print > PDF** from the Application Bar.


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]

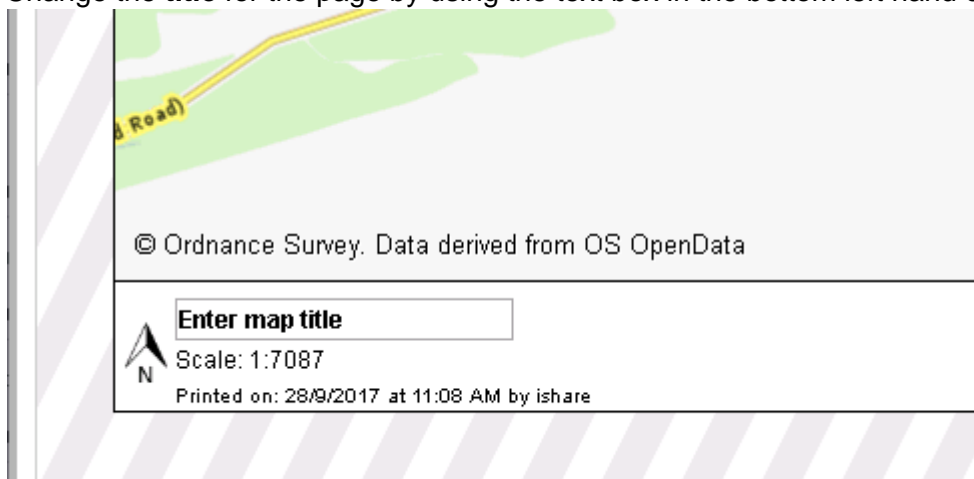
Left margin (10 mm) :
[Slider]

In the map itself, you can:

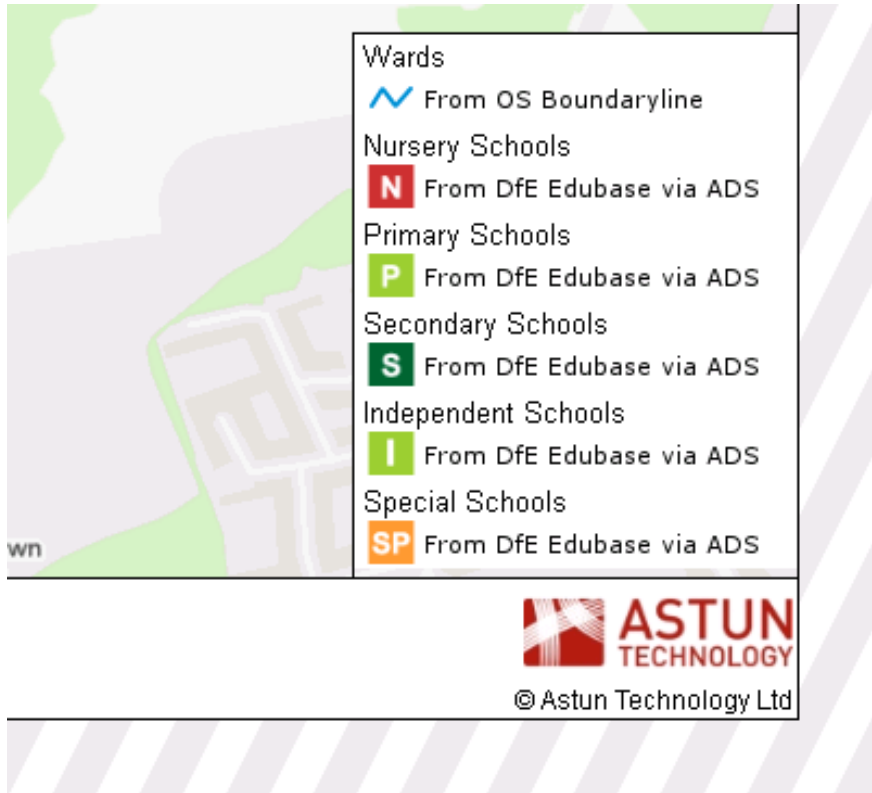
- Use the **Navigation Tool** to zoom in or out, or pan to a different area of the map
- Use the mouse to navigate the map in the same way as you would in the main iShare interface

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.

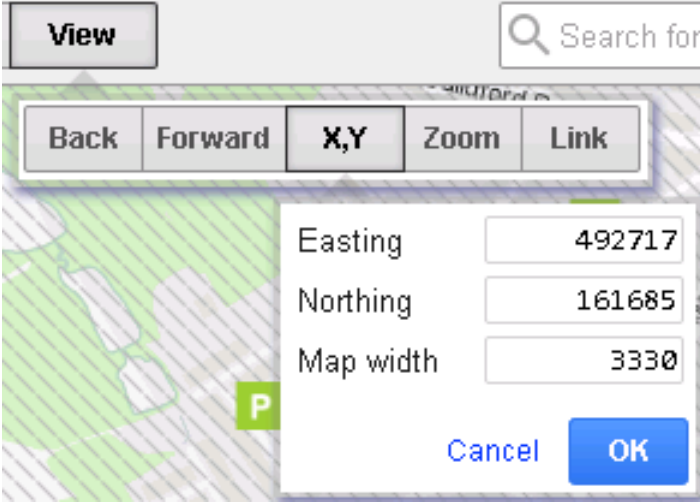
11.2. Printing to Image

- 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>

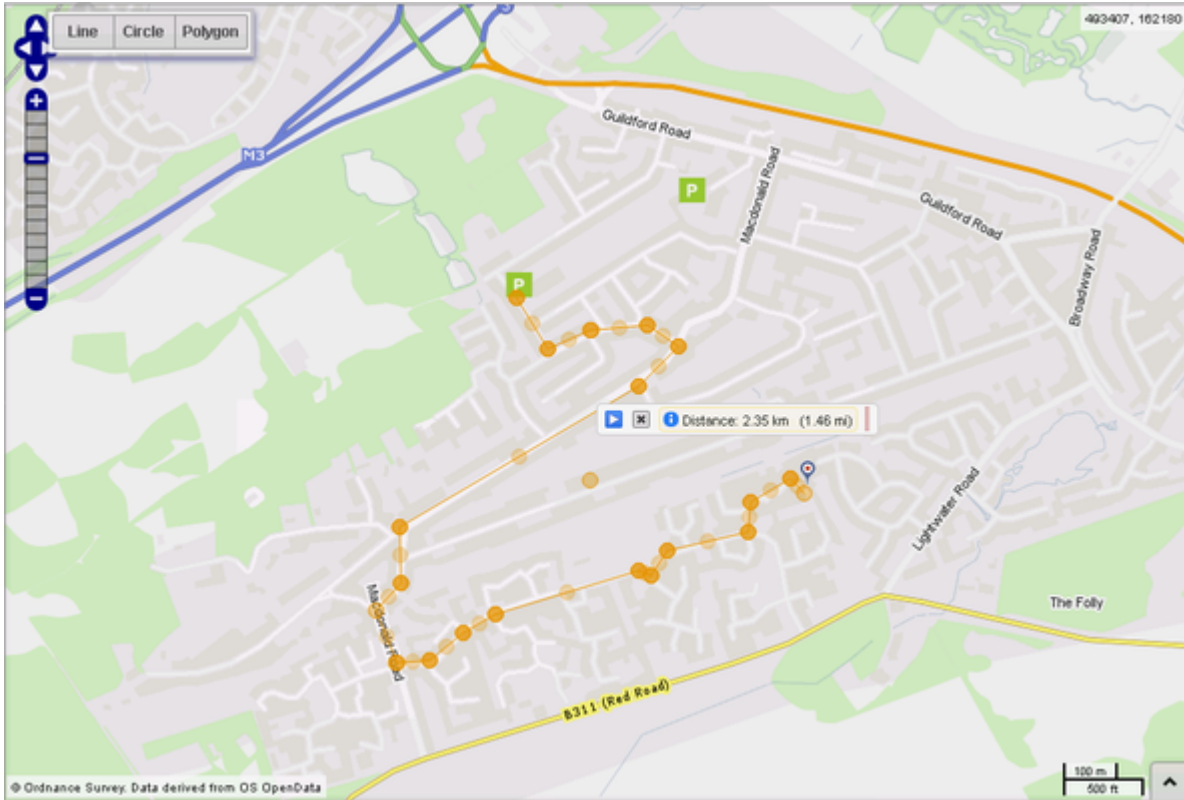
13. Measuring

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.

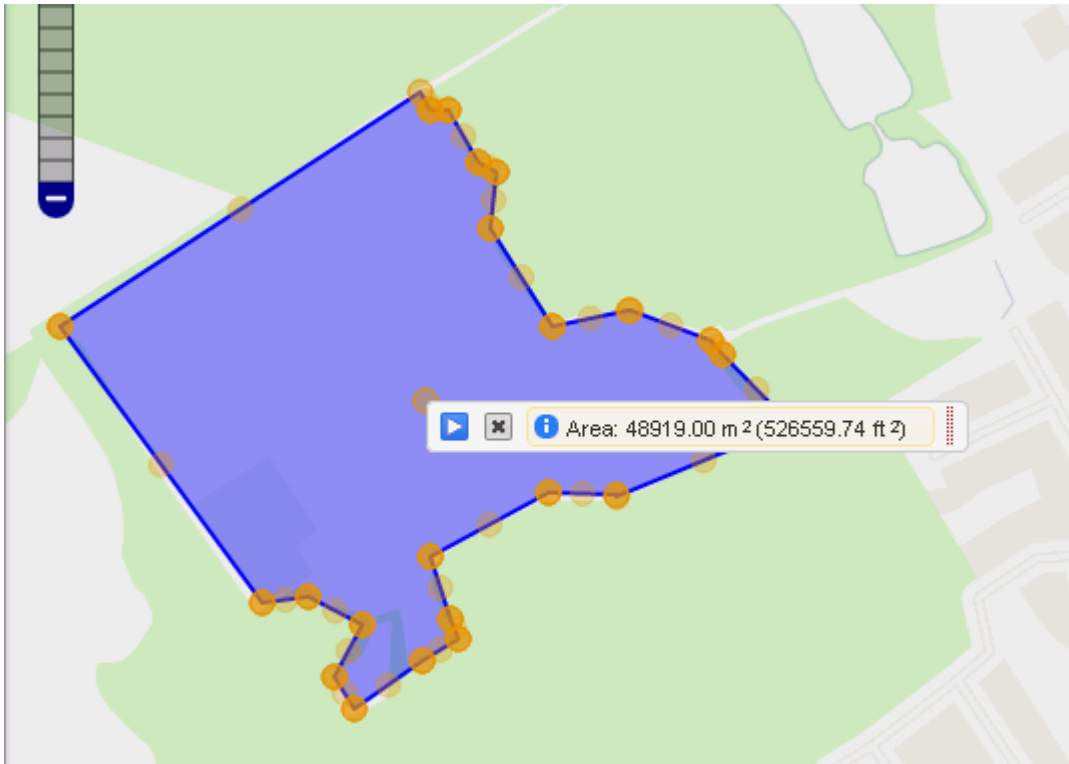
- If you are unhappy with the positioning of any of the nodes, drag them with the mouse to move them and the distance will be re-calculated.
- Add nodes by selecting and dragging the lighter nodes which appear between the main nodes.
- You can move the entire line by selecting the 'centre' node which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

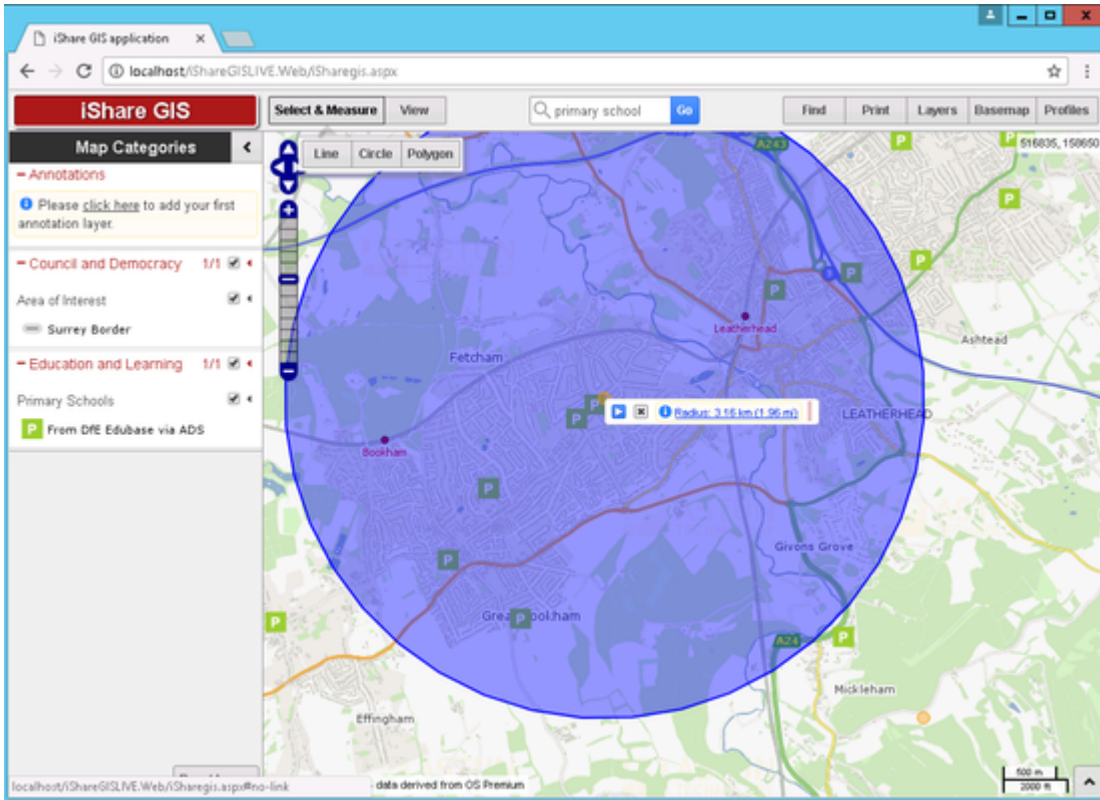
- Select **Default** from the **Profiles** button.


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

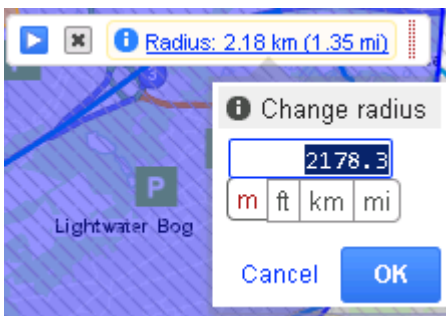
- Now turn on the Education and Learning and Council and Democracy Layer Groups by clicking in the box beside the relevant Layer Group in the Map Categories window.


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 .

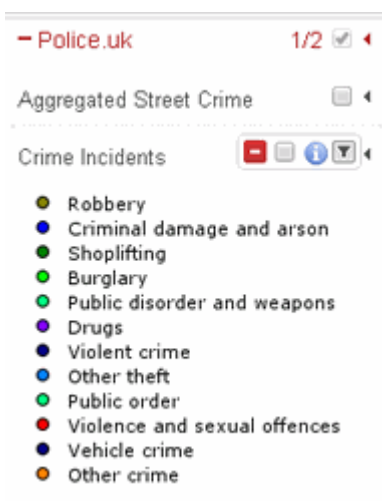
14.2. Using the Polygon tool

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".
 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.

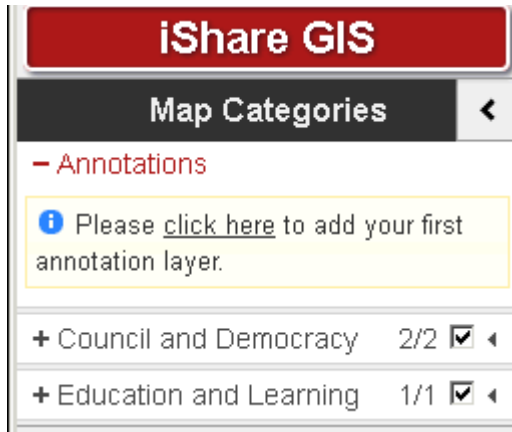
Layer annotations require a user be authenticated. This is so that the annotation can be stored by iShare GIS against the user's authenticated name. Annotations are not stored in cookies, and if the user is unauthenticated (i.e. the web application is being used anonymously) then the annotations will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

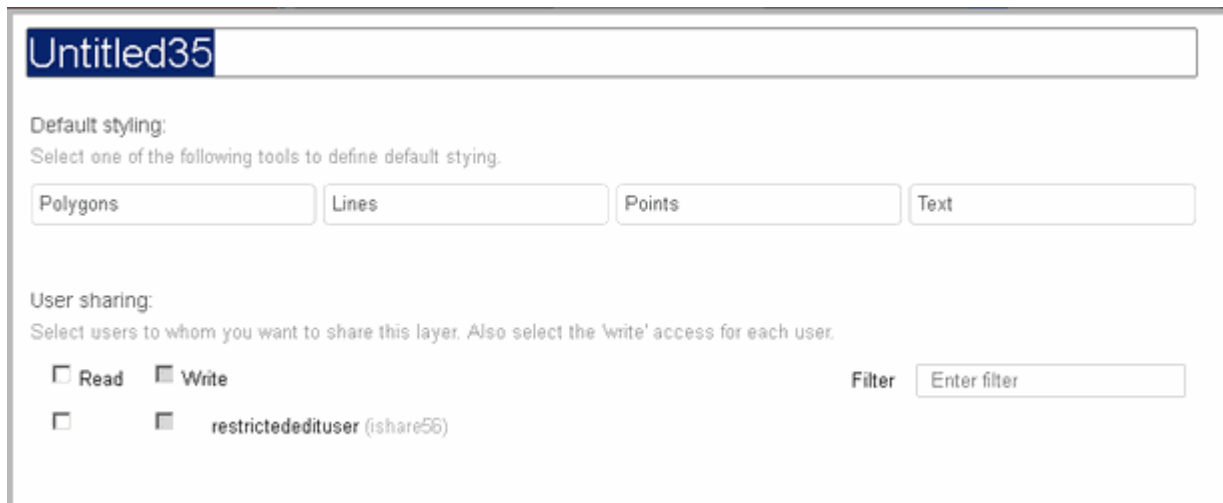
If you have not created any annotation layers, or none have been shared for your use, there will be a message under Annotations with a link to adding your first layer.



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.

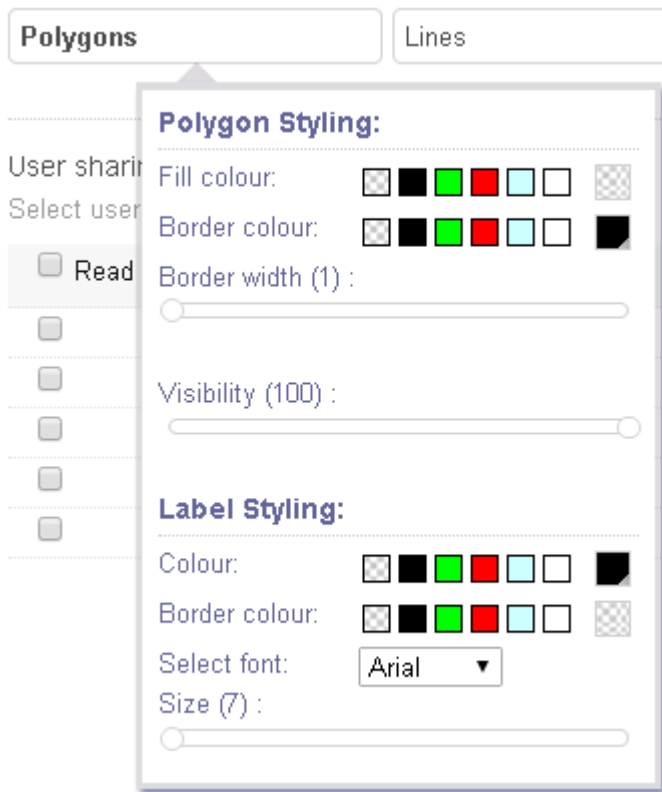


The properties dialogue for the new layer is displayed.

- 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.

<ul style="list-style-type: none"> 1. Introduction 2. Managing User Access Using Roles <ul style="list-style-type: none"> 2.1. The Roles Editor 2.2. Roles Demonstration 2.3. Editing Features in Layers 3. Annotations 4. Creating your own Print Template <ul style="list-style-type: none"> 4.1. Template Settings <ul style="list-style-type: none"> Allowed Page Sizes Scales 4.2. JavaScript 4.3. Defining a Style Sheet 4.4. HTML Structure <ul style="list-style-type: none"> Changing the Logo & Copyright Using the iShare predefined Selectors Displaying a Legend Print the User Name on the PDF output Adding a North Arrow 	<p style="text-align: center;">An Astun Technology iShare Training Module</p> <table border="1" style="width: 100%;"> <tr> <td style="width: 20%;">Code</td> <td>IISG-2.56</td> </tr> <tr> <td>Title</td> <td>iShare GIS for Administrators</td> </tr> <tr> <td>Description</td> <td>Topics specific to iShare GIS, including Roles and Profiles, editing, annotations.</td> </tr> <tr> <td>Required Software</td> <td>iShare GIS 5.6.0</td> </tr> <tr> <td>Target Audience</td> <td>iShare Administrators</td> </tr> <tr> <td>Pre-requisites</td> <td>iShare for Administrators</td> </tr> <tr> <td>Duration</td> <td>2 hours</td> </tr> <tr> <td>Version</td> <td>1.0</td> </tr> <tr> <td>Updated</td> <td>28 Sep 2017</td> </tr> <tr> <td>Updated by</td> <td>Kim Stimpson</td> </tr> <tr> <td>Status</td> <td>Complete</td> </tr> </table>	Code	IISG-2.56	Title	iShare GIS for Administrators	Description	Topics specific to iShare GIS, including Roles and Profiles, editing, annotations.	Required Software	iShare GIS 5.6.0	Target Audience	iShare Administrators	Pre-requisites	iShare for Administrators	Duration	2 hours	Version	1.0	Updated	28 Sep 2017	Updated by	Kim Stimpson	Status	Complete
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1. Introduction

This module aims to supplement the *iShare for Administrators* module with content that is specific to iShare GIS. It will normally be undertaken in conjunction with that module, and also assumes that trainees have taken the *iShare GIS for Users* module. The URL for the application on Astun's standard training instances is <http://localhost/iShareGISLIVE.Web/iSharegis.aspx>.

2. Managing User Access Using Roles

iShare GIS can be used to control the display of information that is sensitive, or which requires filtering from general use. For example locations of domestic abuse crimes should not be widely available, and detailed planning applications should only be available to those in the planning department. The mechanism which iShare uses to do this is *Roles*.

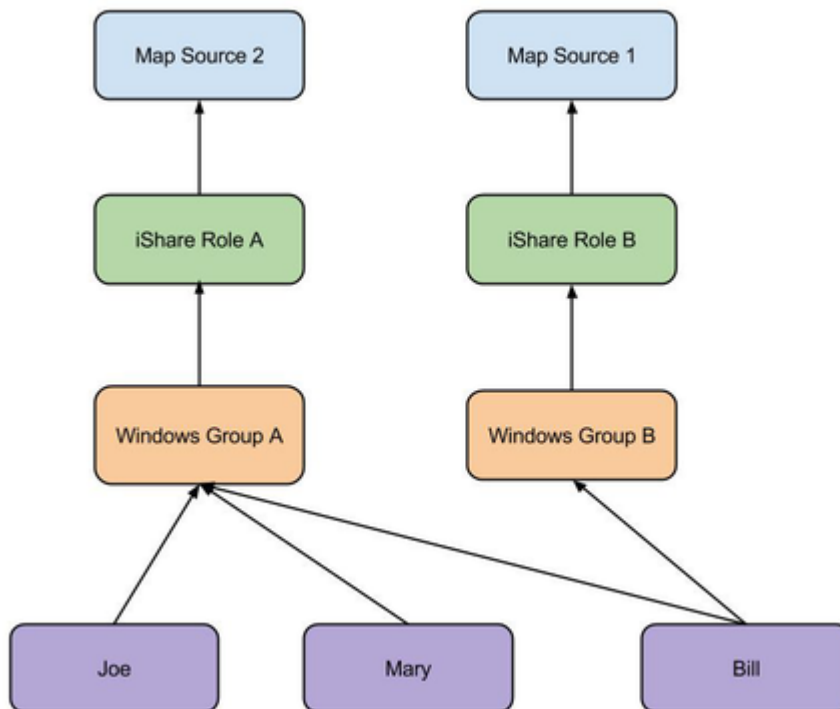
- Roles can be allocated to map sources, with the result that those map sources are only visible to users who have the required Role.
- You can also link a Role to an individual OGC layer to allow users with the Role to edit the layer.
- Allocation of Roles made by linking the Role to local (to the server) Windows Groups.
- Members of the groups then have the Roles which are linked to the group.

For example, if you wanted to allow only members of the Planning team to view planning data, you would:

- In iShare, create a 'Planning' map source and the required layers within it
- In Windows, create a local Windows Group, e.g. 'Planning Users', and add to it the Windows users or groups who need access to the data
- In iShare, create a role e.g. 'Planning Users', and link it to the Windows Group 'Planning Users'
- In iShare, allocate the 'Planning Users' role to the Planning map source
- To allow users to edit layers in Planning, you would add the Role to the specific layers

In the example below:

- Joe, Mary and Bill have access to Map Source 2
- Only Bill has access to Map Source 1



Note that:

- A map source can be accessible by more than one Role
- A Role can only be linked to one Windows Group

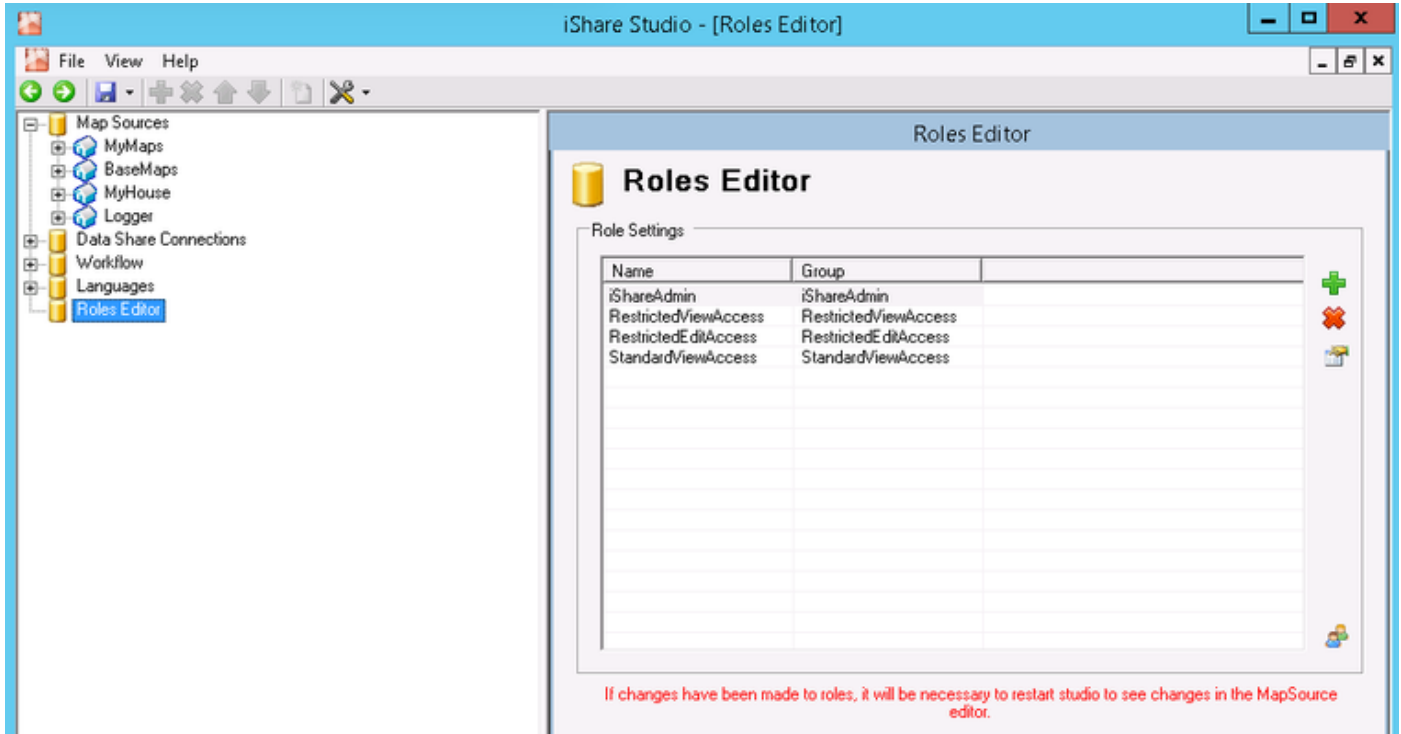
There are some important points to understand when managing Roles:




- iShare uses Windows Active Directory (or an equivalent authentication mechanism) to determine group membership, and hence to determine whether to allow the current user access to map sources
- In the iShare GIS web interface, map sources correspond to **Profiles**
- If no Roles are allocated to a map source, it will be visible to all users
- As soon as one or more Roles are allocated to a map source, it is only visible to users with those Roles
- The default map source should not have Roles allocated to it
- Members of the iShareAdmin group will be able to see all map sources
- Default Windows Groups such as **Administrators, Guests, Remote Desktop Users**, etc. **should not** be used as bases for iShare Roles. This is because Microsoft .NET may not list an Active Directory User as belonging to these Groups on the iShare Web Service server but only as belonging to them on the Domain. This means that the user will not belong to the Role(s) in question, as we rely on the fact that they are in the Local Groups to authorize them.

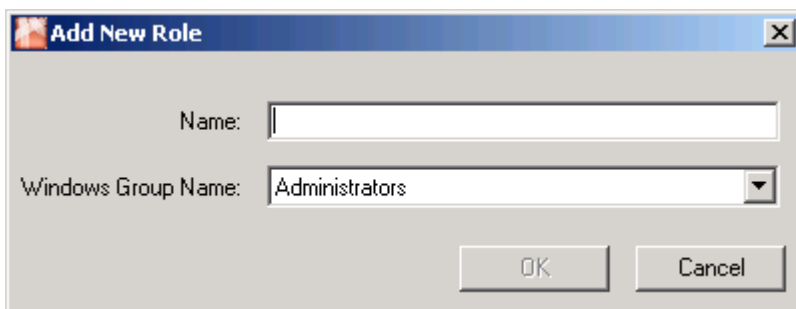
Note: It is important to develop a detailed plan for data management and user access before creating map sources, Roles and Windows groups - once they are all in place it will be time-consuming to revise them.

2.1. The Roles Editor

Once you have created Windows Groups you can apply these to individual iShare Roles using the Studio Roles Editor, which is the last item in the Studio navigation tree.



You can use the **Add**  or **Remove**  buttons to add and remove Windows Groups from the **Roles Editor** or click the **Edit** icon  to amend existing details.



Add a new role named **Test** and assign the Windows Group **iShareAdmin** to it.

Make sure that you **Save** all your changes in Studio by clicking the **Save** button. You will also need to close Studio and re-open in order to see any new roles under the Map Source **Roles** node. Once you have created your iShare Roles you can then apply them to individual **Map Sources** and **OGC Map Layers**.

2.2. Roles Demonstration

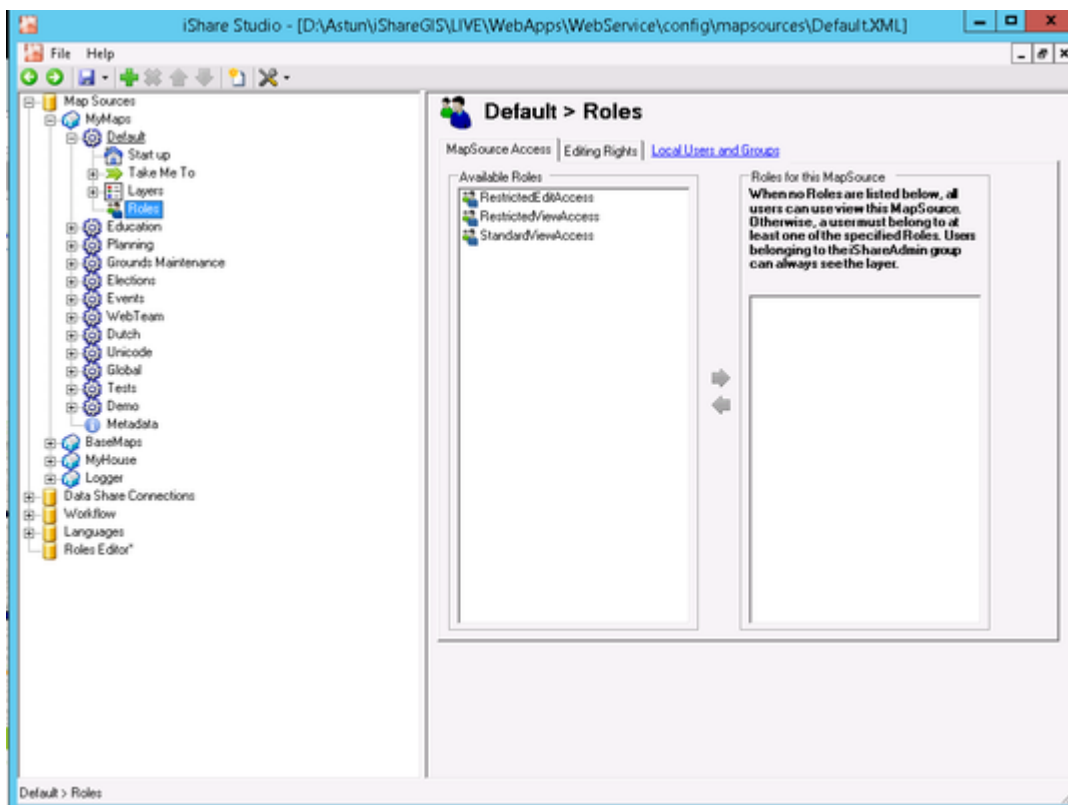
We will now use the training instance to demonstrate how Roles work in practice.

Local Users for testing Roles

User	Group	Password	Notes
------	-------	----------	-------

StandardViewUser	StandardViewAccess	WillWorseHarvestNotebook8	User has no access to restricted mapsources.
RestrictedViewUser	RestrictedViewAccess	CupSpringEasySportFemale5	User has access to all restricted mapsources.
RestrictedEditUser	RestrictedEditAccess	UnitDoctorDescentPlease5	User has editing rights to all OGC layers in restricted mapsources.

1. Run iShare GIS as the above users.
 1. **StandardViewUser** only has access to the default mapsource.
 2. **RestrictedViewUser** has access to all restricted mapsources but no editing rights.
 3. **RestrictedEditUser** has editing rights to all OGC Layers in restricted mapsources.
2. In Studio remove permissions on Layers and mapsources and see how this reflected in the application.



3. Refresh the browser and IIS Application Pools etc. to clear any caching if needs be (though this shouldn't be necessary).
4. Examine the local Users and Groups dialog. Note that Domain groups can be members of local groups.

2.3. Editing Features in Layers

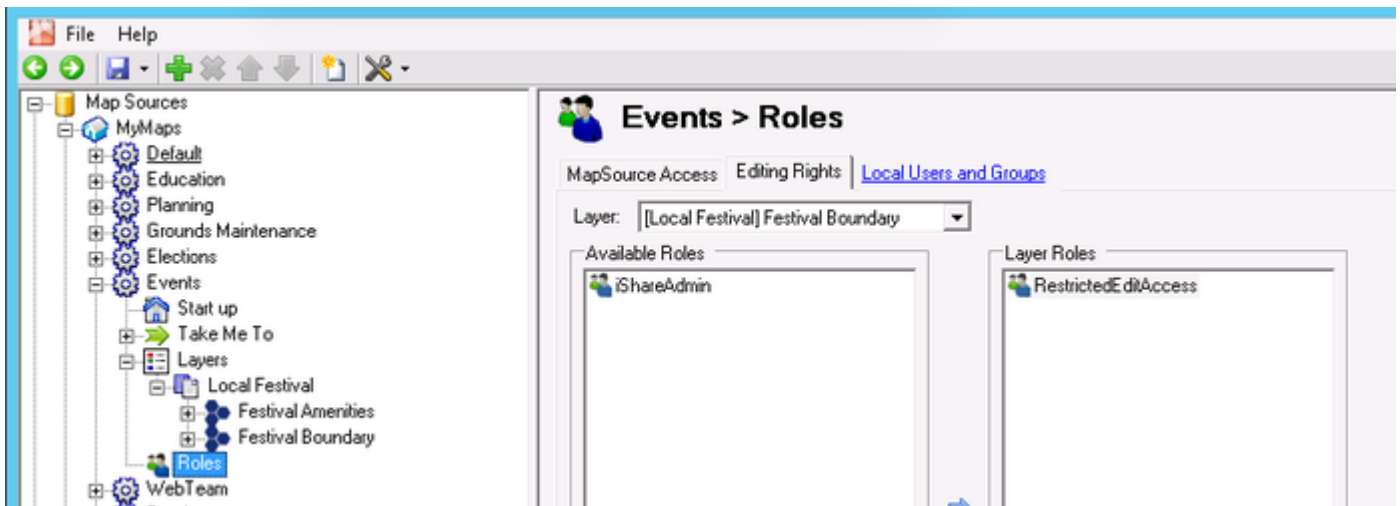
Layers (OGC but not Classic) can be edited by end users using the iShare GIS editing tools. This allows users to edit data directly in the database table which the OGC Layer references.

Editing permissions are controlled by iShare Roles. For a member of a Role to be able to edit an OGC layer:

- a Role which they are a member of needs to have access to the Profile (map source) which the layer is in, and
- the Role needs to be allocated to the layer in **Layer Roles**.

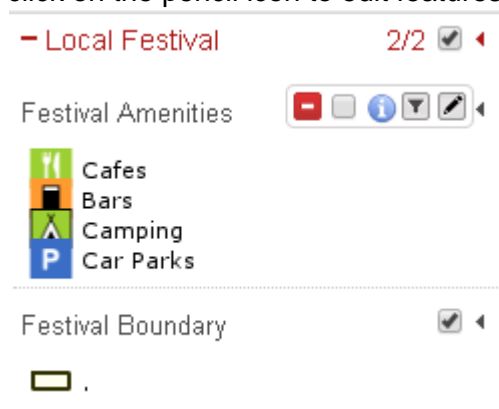
To set this up:

1. Go to the **Roles** node for the Events map source and select the **Editing Rights** tab.
2. Now select the **FestivalAmenities** layer and then select the **RestrictedEditAccess** Role.
3. Save your changes.



Once a layer has been associated with a Role, all members of the role will be able to edit the layer, and the 'pencil' icon (see below) will be present in the layer's sub-menu in the iShare GIS web interface legend for the layer. The festival boundary layer is defined by sql that contains a where clause which makes it unavailable for editing.

1. Open the iShare GIS application, select the **Events** Profile (*if this is not displayed then you need to open Studio, click on the **MyMaps** node, select the **Events** Map Source and untick the **Hidden** check box*)
2. Expand the **Local Festival** Layer Group, expand the **Actions** for the **Festival Amenities** Layer and click on the pencil icon to edit features for the layer.



3. You will see a **Select feature** button - try this on the Festival Amenities layer and change and save it (hint: type "cafe" for the icon).
4. Click the **New feature** button to add a new Amenity.

3. Annotations

Annotations allow users to add their own layers, to style them, and to share them with others. This is discussed in detail in the *iShare GIS for Users* module.

There may be occasions when Annotation layers need to be transferred to normal iShare layers, in order to formally publish them for example, or to allow them to be edited in an external programme. This can be done by accessing the tables which hold the annotations in the *annotations* schema of the iShare GIS database - the tables are:

- features
- layers
- layers_access
- layers_styles

These tables can be exported so that they can be used in GIS software or elsewhere in iShare, using SQL which Astun can provide.

4. Creating your own Print Template

Although iShare GIS comes with default Print Templates it is often the case that you would want to create your own bespoke template. You would normally start by copying one of the supplied templates which may be found in the **Web\print** folder before changing / renaming to suit your requirements.

Open the Print Template in a text editor and then we will explain what the different sections control.

4.1. Template Settings

The code below overrides the default print settings. It can be added inside a script block in the head of a print template. Settings can be removed as required. Open **A3-portrait.html** to see this in action.

```
//Leave the properties which you want to change, you can safely remove
the rest
var defaultSettings = {
  'marginTop' : 10, //mm
  'marginRight' : 10, //mm
  'marginBottom' : 10, //mm
  'marginLeft' : 10, //mm
  'pageSize' : 'A4', //full list
  http://doc.trolltech.com/4.6/qprinter.html#PageSize-enum
  'orientation' : 'portrait', //Possible values 'landscape' &
'portrait'
  'headerHeight' : 0, //mm
  'headerPadding' : 0, //mm
  'footerHeight' : 15, //mm
  'footerPadding' : 1 //mm
  'scales' : [ 250000, 125000, 50000, 25000, 10000, 5000, 2500, 1250,
1000, 500, 250, 125 ]
}
```

Allowed Page Sizes

For the full list of allowed page sizes please see [Creating your own Print Template](#) in the on-line iShare documentation.

Scales

The '**scales**' option above shows the default scales and as such may be removed altogether. To customise your own range of scales simply specify your own entries for the parameter. If a user enters a scale that is outside the defined range then the scale will default to the maximum or minimum entry as required.

When the map is selected the current scale will automatically be added to the selection as (Original 1:nnnn).

1. Due to some restrictions adjusting the height of the map element to correctly position it in the selected page size; you will need to adjust the header and footer height or padding using these options. **PLEASE DO NOT USE CSS TO ADJUST HEIGHT OR PADDING OF HEADER AND FOOTER.**
2. At present the page size and print scale only generate accurate results when defined in **Milli meters**, as above, and not pixels etc.

4.2. JavaScript

```
<script type="text/javascript"
src="../../js/lib/prototype-1.6.0.3.js"></script>
  <script type="text/javascript"
src="../../FileIncluderJS.aspx"></script>
  <script>Astun.JS.IncludeJS('print');</script>
```

No JavaScript files should be removed as the maps and will not work properly.

4.3. Defining a Style Sheet

```
<link type="text/css" rel="stylesheet"
href="css/templates/astun-A4-common.css" />
```

We have provided one editable style sheet **astun-A4-common.css** with iShare which may be customised. We would suggest that you copy the supplied css before making your changes.

If you wish to use a different style sheet then please change this entry to reflect the style sheet you wish to use.

4.4. HTML Structure

Example

```

<div id="wrapper">
  <div id="header"></div>
  <div id="mapWrapper">
    <div id="map"></div>
    <div id="atLegends" class="atBottomRight"></div><!-- other
possible css classes: atBottomLeft, atTopRight, atTopLeft (you can use 1
at a time) -->
  </div>
  <div id="footer">
    <div id="atGenInfo">
      <h1 id="atPageTitle" class="isharemaps-edit-inline">iShare
printing</h1>
      <p id="scale">Scale: 1:<span
id="isharemaps-scale">undefined</span></p>
      <p class="printinfo">Printed on: <span
id="isharemaps-print-date"></span></p>
    </div>
    <div id="atCompanyDetails">
      
      <div id="copyright">&copy; Astun Technology Ltd</div>
    </div>
  </div>
</div>

```

You can change the order of the **header** or **footer**; change the position of the **map** element; add extra **css** classes to the elements to control using css.

Please do not change or remove the the 'IDs' or 'CLASS' from any element as this can create problems.

Changing the Logo & Copyright

You may also change the **logo** but make sure the height of the logo image does not exceed the height of the footer/header provided in the **Template Settings** and of course the **copyright text**. Also please use **.png** or **.jpg** for the logo images, **.gif** images will not work.

The PDF generation does not support **.gif** images.

Using the iShare predefined Selectors

There are currently four iShare selectors that you may use within your print template. These selectors may be used as many times as required in the template, we have used three of these in the following example.

iShare printing

Scale: 1:14173

Printed on: 12/11/2015 at 15:38 PM

Selector	Description
isharemaps-edit-inline	This displays an editable box where the user can type any information they require to be printed. This is designed to be used in line with other text or on its own. Here we have pre-populated the entry with iShare printing” but the user will be able to change this.
isharemaps-edit-block	This displays an editable block designed to be used on block elements such as paragraphs.
isharemaps-print-date	This displays the current date
isharemaps-scale	This displays the currently selected scale for the map

Displaying a Legend

A **Display Legend** check box will be included in the header of the default templates e.g.



If you wish to remove the **Legend** from the Print template then simply remove the **atLegends div** e.g.

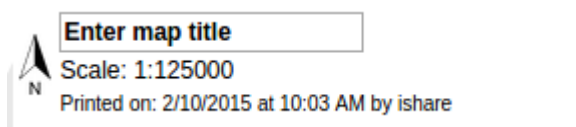
```
<div id="atLegends" class="atBottomRight"></div><!-- other possible css
classes: atBottomLeft, atTopRight, atTopLeft (you can use 1 at a time)
-->
</div>
```

For large legends a style rule may need to be added to the end of the head element in the template html file.

```
<style type="text/css">#mapWrapper {
  overflow:hidden;
}
</style>
```

Print the User Name on the PDF output

You may add the user account to the PDF output from iShare GIS e.g.



Where **ishare** is the user name.

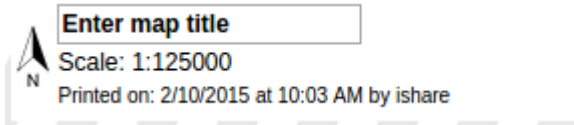
In order for this to happen you need to do the following:

- Save `printusername.js` into the **Web/custom/js** folder.
- Add the following line to the `template.html` immediately before the `</head>` entry.

```
<script type="text/javascript"
src="../../custom/js/printusername.js"></script>
```

Adding a North Arrow

One way of adding a North Arrow is to add the North Arrow image, along with the existing Page Title, Scale and Print information into a table e.g.



This is what the code would look like:

Adding a North Arrow

```
<table border="0">
  <tr><td>
    
  </td><td>
    <h1 id="atPageTitle" class="isharemaps-edit-inline">Enter map
title</h1>
    <p id="scale">Scale: 1:<span id="isharemaps-scale">undefined</span></p>
    <p class="printinfo" style="font-size: 10px">Printed on: <span
id="isharemaps-print-date"></span></p>
  </td></tr>
</table>
```


<ol style="list-style-type: none"> 1. Introduction <ol style="list-style-type: none"> 1.1. Users & Roles 1.2. Security Model 1.3. Software Familiarisation 2. Administrator Actions <ol style="list-style-type: none"> 2.1. Set up Studio 2.2. Create an Admin user 2.3. Create a Standard user 2.4. Grant/Remove Roles for users 2.5. Create a Schema 2.6. Create a User table 2.7. Move a User Table into a Corporate schema 2.8. Import External data 2.9. Drop a Table 2.10. Changing the default MapInfo styling 2.11. Change MapInfo Styling for a Table 2.12. Create a User View 2.13. Move a Staging Schema View to a Corporate Schema 2.14. Create a View in a Corporate schema 2.15. Load a Non-spatial table into the SDW 	<p><i>An Astun Technology iShare Training Module</i></p> <table border="1"> <tr> <td>Code</td> <td>ISS-1</td> </tr> <tr> <td>Title</td> <td>Spatial Data Warehouse for Administrators</td> </tr> <tr> <td>Description</td> <td>Setting up and managing a Spatial Data Warehouse.</td> </tr> <tr> <td>Required Software</td> <td>iShare 5.4.x Spatial Data Warehouse</td> </tr> <tr> <td>Target Audience</td> <td>iShare Administrators</td> </tr> <tr> <td>Pre-requisites</td> <td>iShare for Administrators</td> </tr> <tr> <td>Duration</td> <td>.5 day</td> </tr> <tr> <td>Version</td> <td>1.0</td> </tr> <tr> <td>Updated</td> <td>12 Nov 2015</td> </tr> <tr> <td>Updated by</td> <td>Kim Stimpson</td> </tr> <tr> <td>Status</td> <td>Complete</td> </tr> </table>	Code	ISS-1	Title	Spatial Data Warehouse for Administrators	Description	Setting up and managing a Spatial Data Warehouse.	Required Software	iShare 5.4.x Spatial Data Warehouse	Target Audience	iShare Administrators	Pre-requisites	iShare for Administrators	Duration	.5 day	Version	1.0	Updated	12 Nov 2015	Updated by	Kim Stimpson	Status	Complete
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1. Introduction

Astun's Spatial Data Warehouse (SDW) is built upon PostgreSQL/PostGIS with a custom security model designed for our typical clients. A typical installation will have Astun staff deploying a SDW to a client's server. They'll also probably migrate some data from an existing spatial database and then provide training on SDW maintenance duties. The purpose of this document is to provide material covering those maintenance duties.

1.1. Users & Roles

The GIS staff will act as the administrator of the SDW; they will be assigned a role called 'admin'.

All staff members will assigned a role called 'staff'.

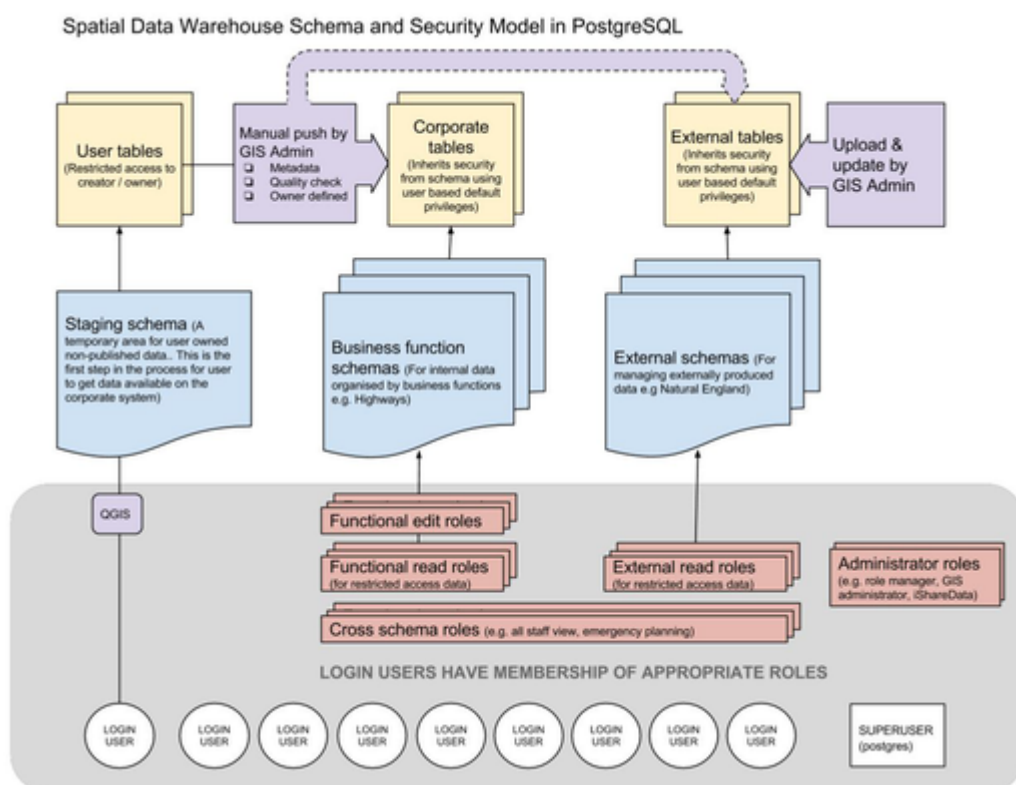
Staff members can create data in the schema called 'staging'. Consider it a scribble-pad area. By default users can only see their own data in this area. Once data is ready for corporate consumption SDW admin

staff will move data tables from 'staging' to another schema. Schemas can be set up for projects or departments.

Schemas are the key to the security model. All tables and views within a schema are owned by the schema_owner role. Editing rights to tables are owned by the schema_editor role and read access is controlled by the schema_viewer role. If the schema has been created with corporate access (think public) in mind then read access is also controlled by the staff role.

1.2. Security Model

Below is a schematic representing the SDW security model. Note that the security model does not permit users to create data in the public schema. It is possible for a superuser to migrate data to the public schema, although it is not recommended.



1.3. Software Familiarisation

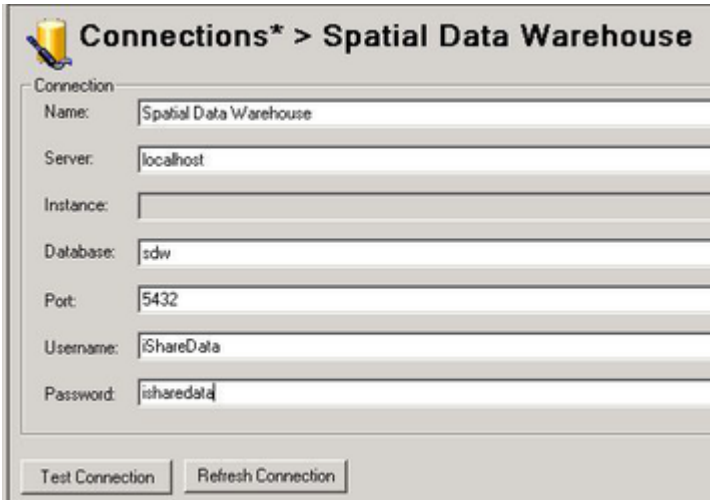
It is important that the admin staff members are familiar with Astun's iShare Studio and pgAdmin3 - the client interface for PostgreSQL databases. They should be able to create Workflow Connections and Workflow Tasks in Studio.

2. Administrator Actions

2.1. Set up Studio

Studio will be used for most of the tasks associated with the SDW. Within Studio you need to create a Workflow Connection that points to the SDW.

- Open Studio
- Expand the Workflow node and right click on Connections and select New Connection.
- Create a Workflow Postgres Connection to the SDW.




For most cases the following details will be suitable for a connection but if in doubt check with Astun Support:

- Enter a Name for your Connection; Server: localhost, Database: sdw Port: 5432 username: iShareData password: isharedata.
- Click Test Connection. You should see a Connection OK dialog. Click OK.
- Click Save to save your new connection details.

Note: If the GIS team decide that they wish to track who runs which task then it will be necessary to create individual Workflow Connections. Use the iShareData account to create admin users and then create Workflow Connections for each admin user. The iShareData connection to the SDW should then be removed. Be aware that Studio will store passwords for Workflow Connections but passwords can be removed from a connection before saving.

2.2. Create an Admin user

- Open Studio
 - Expand the Jobs node, right click on Unassigned tasks and select New Task.
 - Create a Workflow Stored Procedure Task and give it a Name e.g. Create admin user
 - Select the Spatial Data Warehouse Connection, Click on the Astun radio button and select the Function at `_sdw_new_admin`.
 - Select the **username** parameter and enter the name of the user you wish to create by typing in the **Edit parameter 'username'** box. **Note that the task will fail if you call the user "admin" as this is the name of an existing group role.**
 - Repeat for the **password** parameter e.g.

 **Unassigned tasks > Create admin user**

Name:


Connection details
 Function: Work

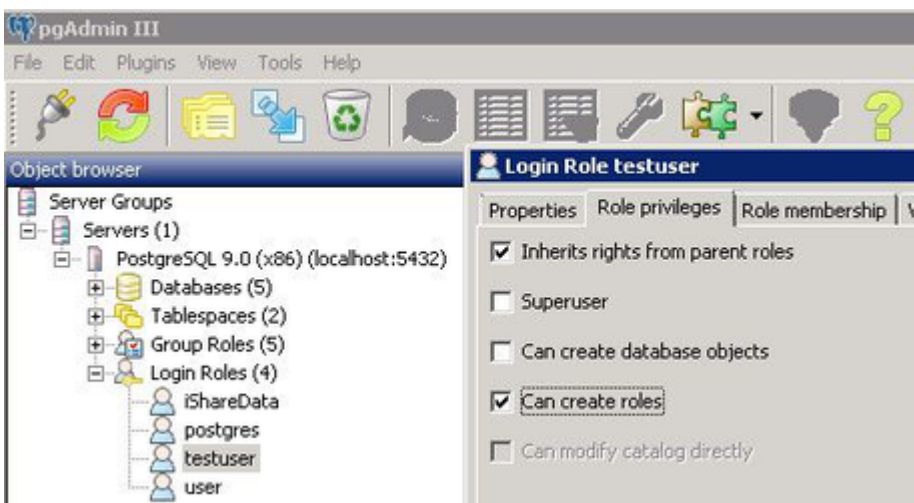
Parameters

No	Name	Type	Value	Description
1.	username	text	testadmin	
2.	password	text	testpassword	

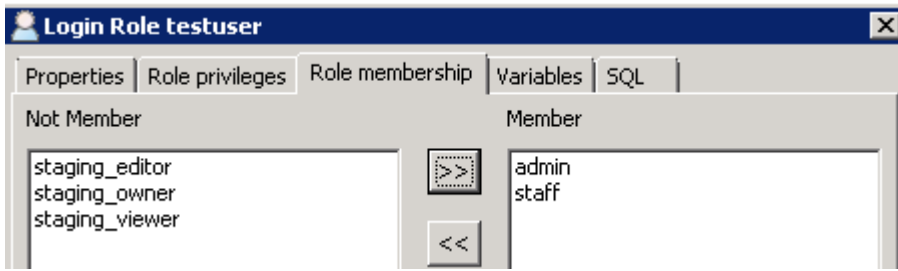
Edit parameter 'username':




- Click the Run button  to run the task. You should see the dialog SPTask 'Create admin user' created successfully. Click OK.
- Click Save to save your new task details.
- Open pgAdmin III
 - Expand the Server details for the SDW server and login using a superuser or administrator account.
 - Expand the Login Roles to show the entries.
 - Right-click on the user you have just created and select Properties.
 - Verify that the box "Can create roles" is checked.



- Now select the Role membership tab.
- Verify that the role "admin" is in the Member box.

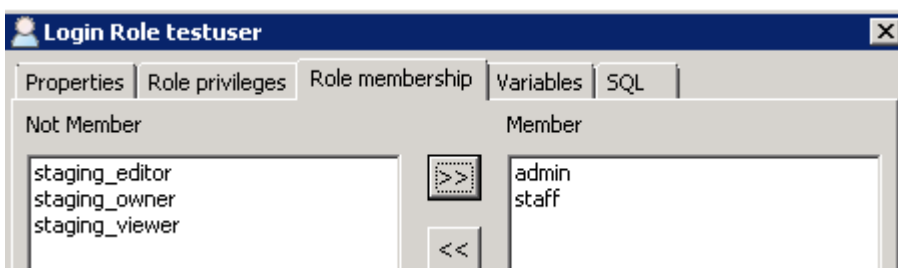


2.3. Create a Standard user

- Open Studio
 - Create a new workflow task called "Create new user"
 - Select the Spatial Data Warehouse Connection, Click on the Astun radio button and select the Function at `_sdw_new_user`.
 - Enter the user and password parameters with the name and password for the user you wish to create.
- Click the Run button  to run the task. You should see the dialog SPTask 'Create new user' created successfully. Click OK.

2.4. Grant/Remove Roles for users

- Run pgAdmin III
 - Expand the Server details for the SDW server and login using a superuser or administrator account.
 - Expand the Login Roles to show the entries.
 - Right-click on the user you have just created and select Properties.
 - Select the Role membership tab.
 - Select the relevant role in the Not Member box and click >> to add to the Member box. For restricted read-only access a user requires the restricted schema **viewer** role. For read/write access a user requires the restricted schema **editor** role.

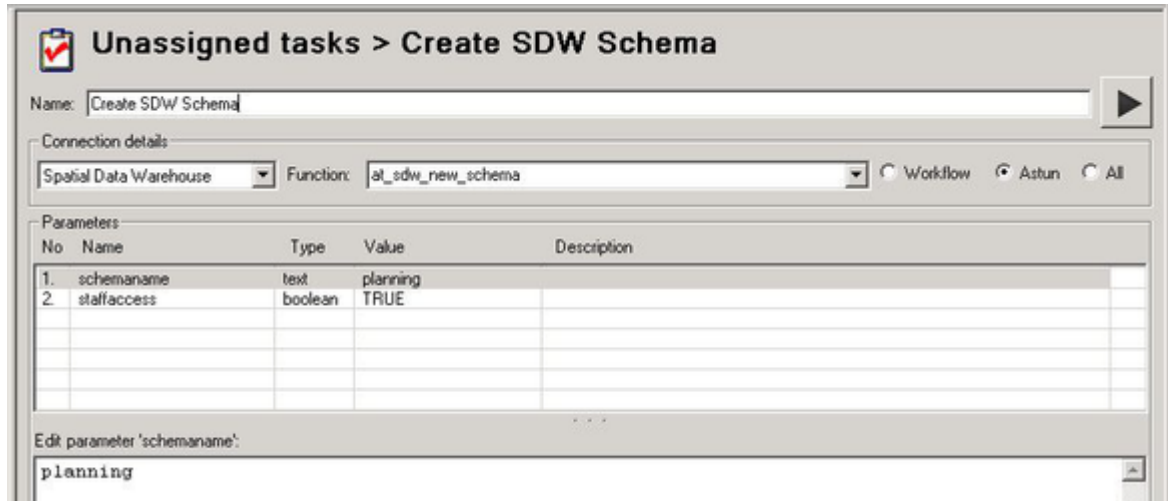


- Click OK.

2.5. Create a Schema

- Open Studio

- Expand the Jobs node, right click on Unassigned tasks and select New Task.
- Create a Workflow Stored Procedure Task and give it a Name e.g. Create SDW Schema
- Select the Spatial Data Warehouse Connection, Click on the Astun radio button and select the Function at_sdw_new_schema.
- Select the **schemaname** parameter and enter the name of your schema in the **Edit parameter box**. Then select the **staffaccess** parameter and enter **TRUE**.



Unassigned tasks > Create SDW Schema

Name:


Connection details:

Spatial Data Warehouse | Function: | Workflow | Astun | All

Parameters:

No	Name	Type	Value	Description
1.	schemaname	text	planning	
2.	staffaccess	boolean	TRUE	

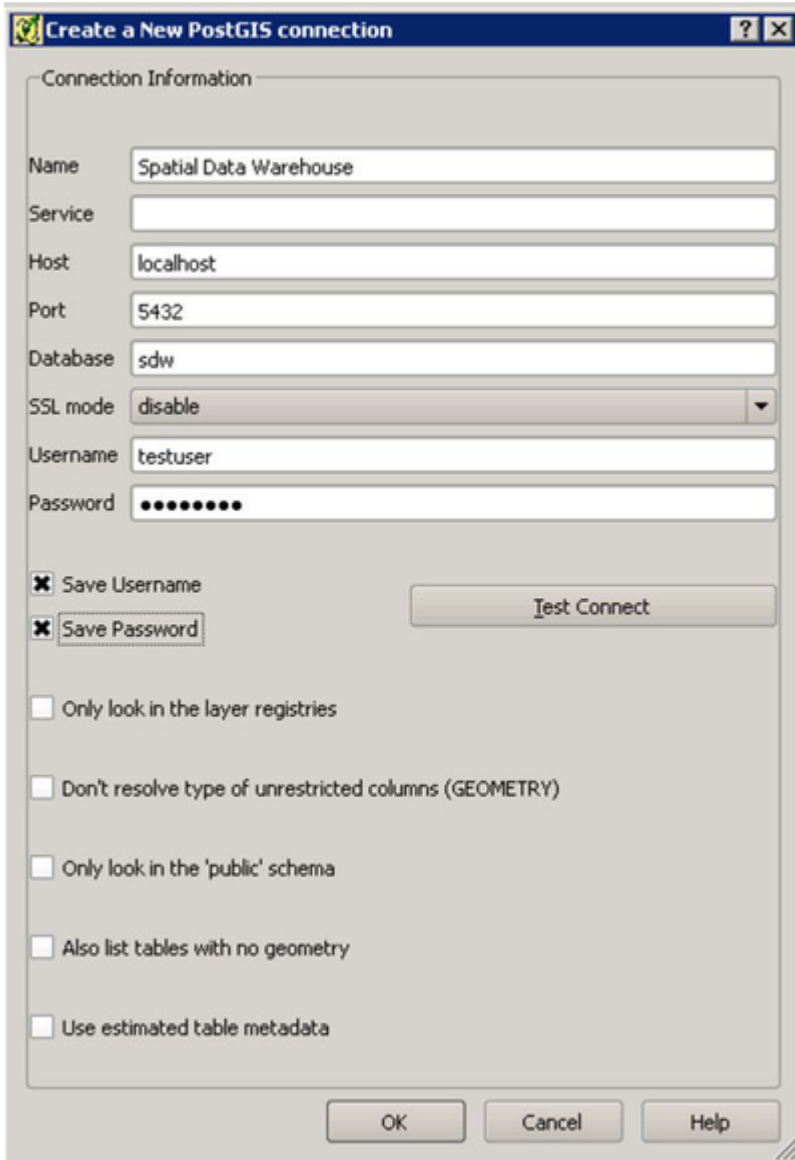
Edit parameter 'schemaname':

- Note: Change "TRUE" to "FALSE" for a private schema.
- Click the Run button  to run the task. You should see the dialog SPTask 'Create SDW Schema' created successfully. Click OK.
- Click Save to save your new task details.

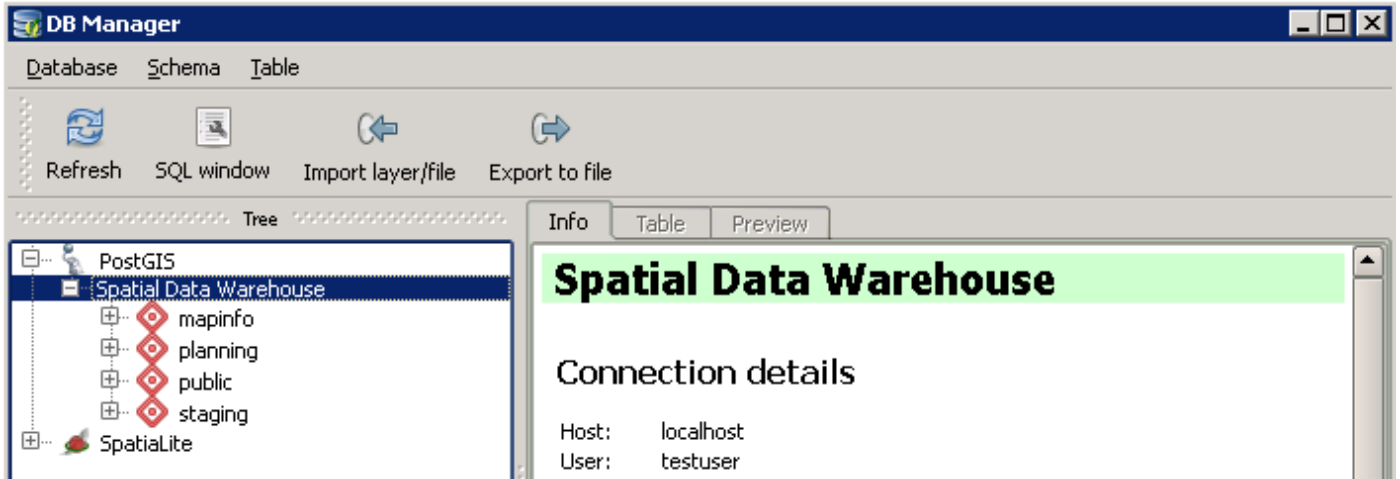
2.6. Create a User table

Note: Users will only be able to create their own tables in the 'staging' schema.

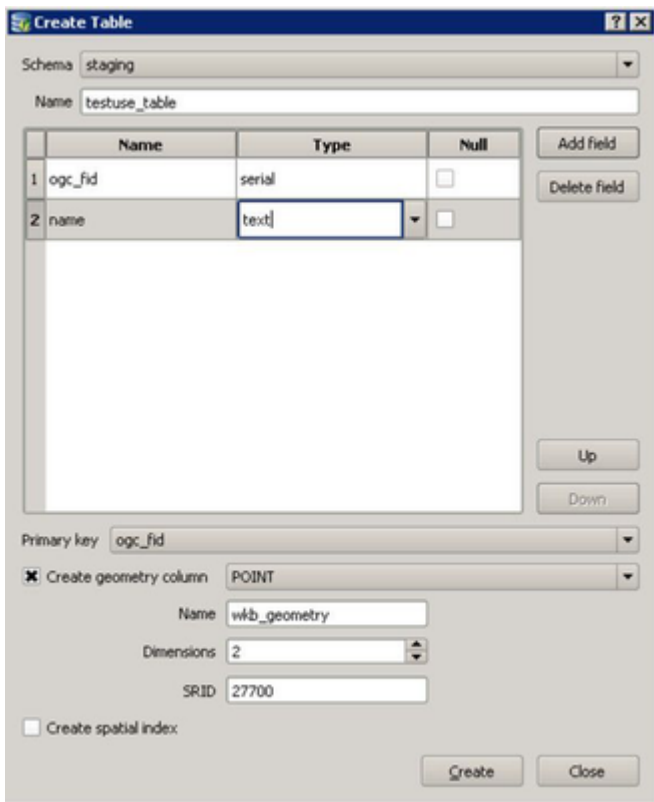
- Open QGIS
 - Select Add PostGIS Layers... from the Layer menu.
 - Click the New button under Connections to create a connection to your SDW.



- Enter the details for your SDW and the admin user that you created previously. See above screenshot for details.
- Click Test Connect to make sure you have entered your details correctly and then click OK.
- Click Close to close the Add PostGIS Table(s) dialog.
- Now select the DB Manager > DB Manager from the Database menu.
- Expand the PostGIS node to display the Spatial Data Warehouse connection we have just created.
- Expand the node for your SDW and you will see any existing schemas e.g.



- Select the staging schema from the tree and then go to the Table menu and select Create Table.



- The first field needs to have a Name of **ogc_fid** and be Type **serial**. Then you may click Add field to add any other fields that you require.
- Select ogc_fid as the Primary key, check the Create geometry column box, select the geometry type from the list; enter the Name as **wkb_geometry** with an SRID of **27700** and **2** dimensions.
- Click Create. You should see an "everything went fine" dialog - click OK. Click Close.

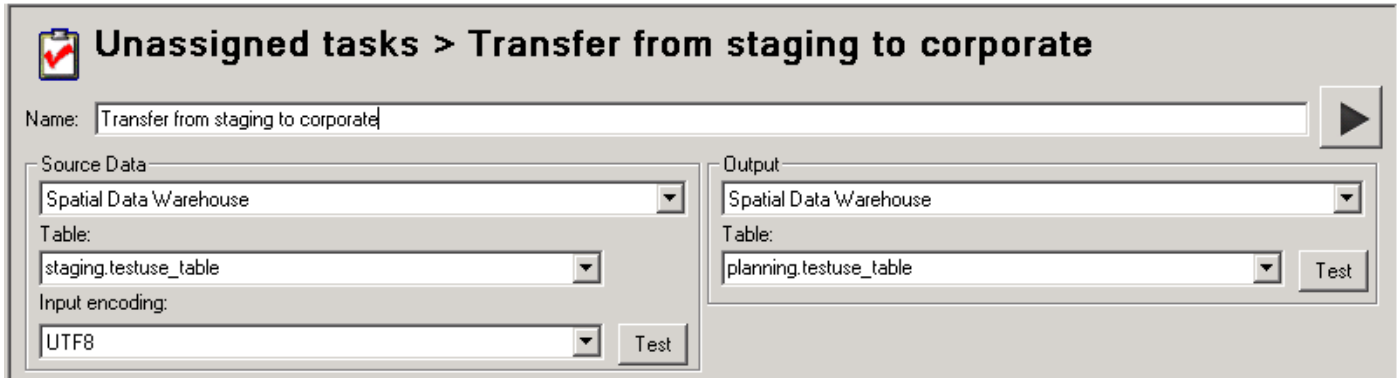
2.7. Move a User Table into a Corporate schema

GIS Admin users will be able to transfer tables from the 'staging' schema to a 'corporate' schema.

- Open Studio - First we need to create a task to transfer the table from the staging schema into the

corporate schema [in this case planning].

- Expand the Jobs node, right click on Unassigned tasks and select New Task.
- Create a Workflow Spatial Data Transformation Task and give it a Name e.g. Transfer from staging to corporate.



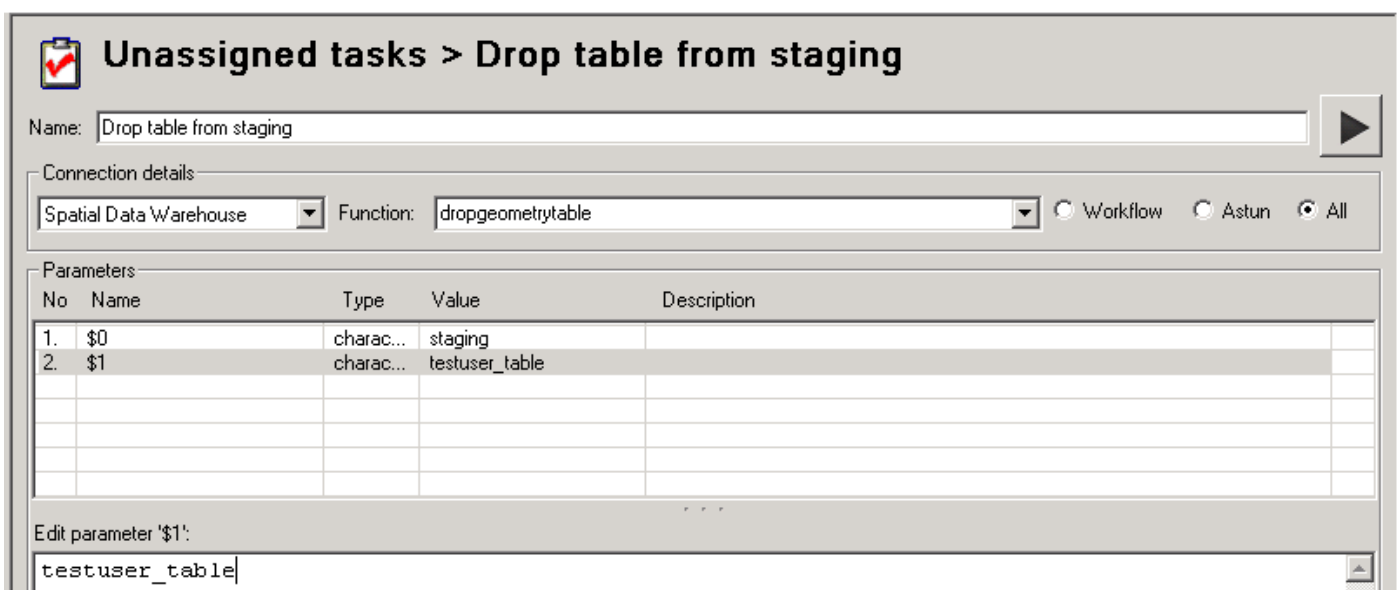
Unassigned tasks > Transfer from staging to corporate

Name:

Source Data:
 Table:
 Input encoding:

Output:
 Table:

- Select your Spatial Data Warehouse as both your Source Data and Output.
 - Pick the Source Table that you wish to transfer, in this case staging.testuse_table and manually enter the name of the Output Table that you wish to upload to, in the format schema.table, in this case, planning.testuse_table.
 - Run the task. Click OK.
 - Check the contents of the new table in pgAdmin III.
- Now we need to create a task to drop the table from the staging schema.
- Right click on Unassigned tasks and select New Task.
 - Create a Workflow Stored Procedure Task and give it a Name e.g. Drop table from staging
 - Select the Spatial Data Warehouse Connection, Click on the All radio button and select the Function dropgeometrytable - note that there are several functions with this name, ensure that you choose the version that takes exactly two parameters, normally the second in the list (it should look like the image below).
 - Select the first parameter and enter **staging** (schema name) in the **Edit parameter** box. Then select the second parameter and enter the name of the **table** you wish to drop e.g.



Unassigned tasks > Drop table from staging

Name:

Connection details: Function: Workflow Astun All

No	Name	Type	Value	Description
1.	\$0	charac...	staging	
2.	\$1	charac...	testuser_table	

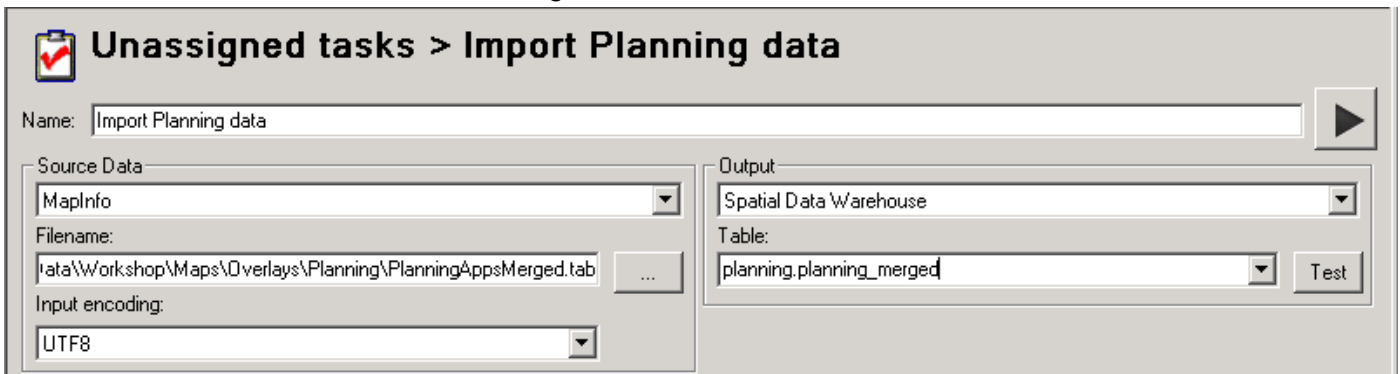
Edit parameter '\$1':

- Run the task. Click OK.
- Note that it is not sufficient to simply delete/drop a Geometry table using pgAdmin3. The approach described above not only drops the table but also clears the reference to it from the public.geometry_columns table.

2.8. Import External data

GIS Admin will be able to import tables into corporate schemas directly.

- Open Studio
 - Expand the Jobs node, right click on Unassigned tasks and select New Task.
 - Create a Workflow Spatial Data Transformation Task and give it a Name e.g. Import Planning data.
 - Select the Source Data from either a file (e.g. MapInfo, ShapeFile) or a pre-defined Workflow Connection.
 - Specify the Output as your Spatial Data Warehouse and enter the Table as schema_name.table_name e.g.



Unassigned tasks > Import Planning data

Name: ▶

Source Data: ▼

Filename: ...

Input encoding: ▼

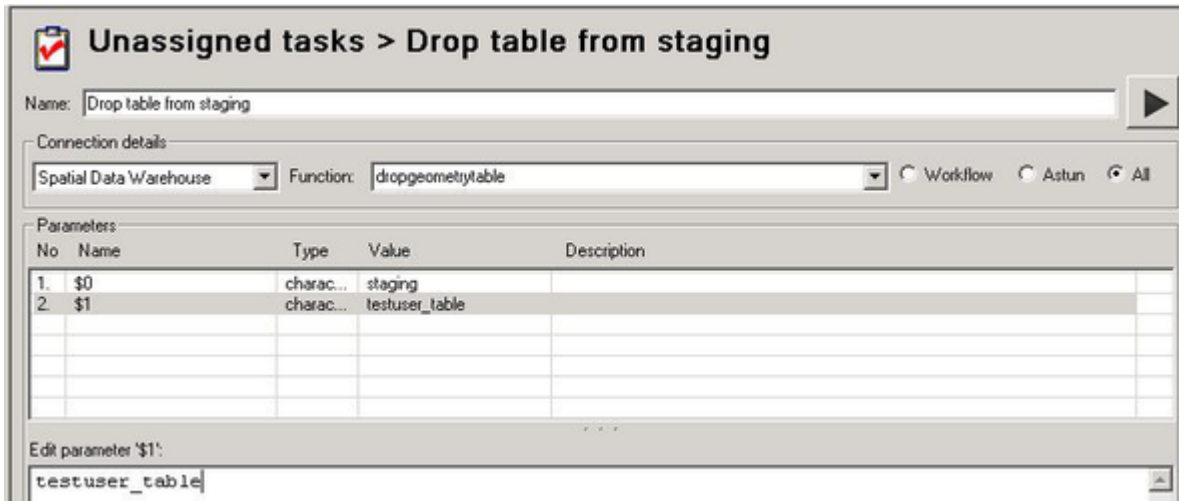
Output: ▼

Table: ▼ Test

- Run the task.

2.9. Drop a Table

- Open Studio
 - Right click on Unassigned tasks and select New Task.
 - Create a Workflow Stored Procedure Task and give it a Name e.g. Drop table
 - Select the Spatial Data Warehouse Connection, Click on the All radio button and select the Function DropGeometryTable.
 - Select the first parameter and enter **staging** (schema name) in the **Edit parameter** box. Then select the second parameter and enter the name of the **table** you wish to drop e.g.

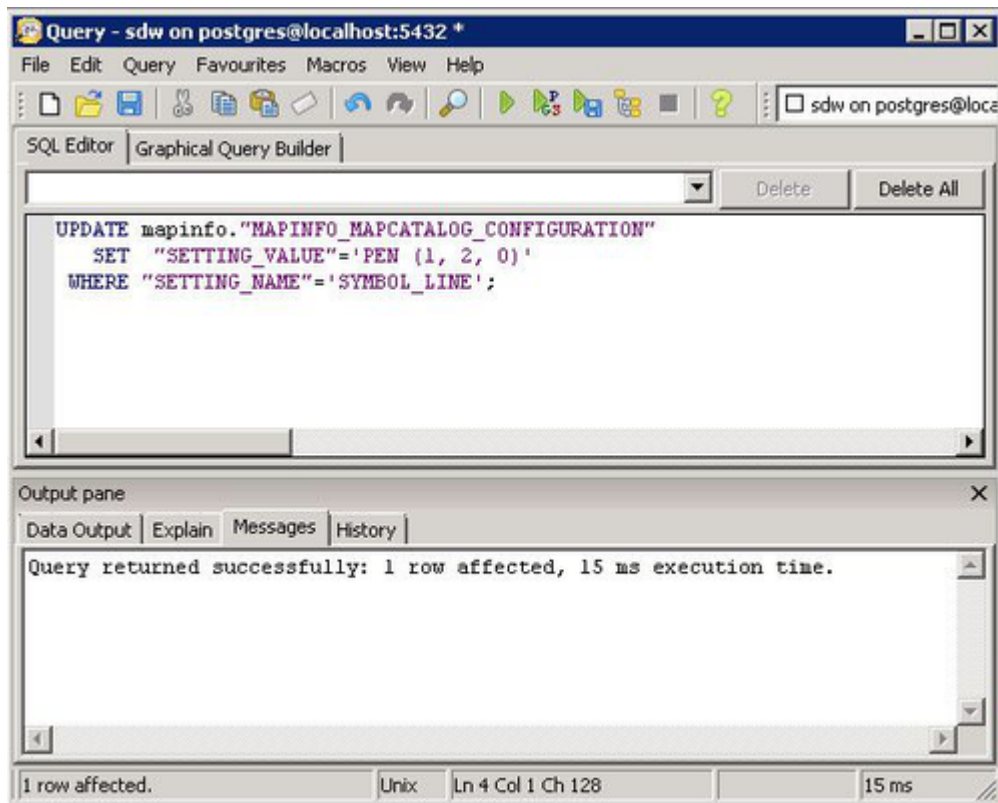


- Run the task. Click OK.

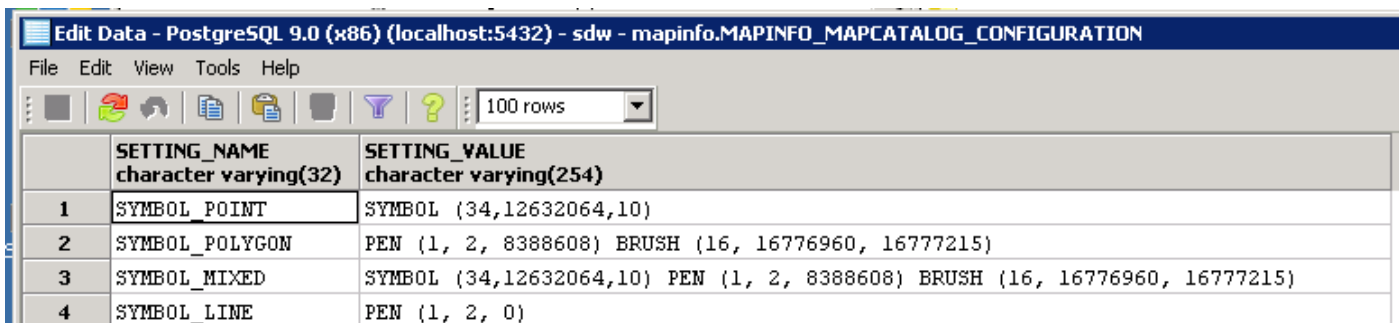
2.10. Changing the default MapInfo styling

Styling for MapInfo is set in the mapinfo.mapinfo_mapcatalog table. If styling doesn't exist when a table is created then the styling rules stored in the mapinfo.mapinfo_mapcatalog_configuration table will be used instead. Please refer to MapInfo documentation for information on the correct values for the styles you require. Note: Any changes to the default MapInfo styling will only be applied to new tables created using Studio and pre-existing tables will have been created with the original defaults.

- Open pgAdmin III and connect to PostgreSQL as a user with admin role.
 - Expand the node for your SDW, expand the Schemas entry, expand the mapinfo schema, expand the Tables.
 - Right click on the MAPINFO_MAPCATALOG_CONFIGURATION and select Scripts > UPDATE Script to open the SQL Editor.
 - Now change the script to update the entry you require e.g.



The above screenshot shows an example of an update to the SYMBOL_LINE entry. The following screenshot details the entries that may be overridden.



	SETTING_NAME character varying(32)	SETTING_VALUE character varying(254)
1	SYMBOL_POINT	SYMBOL (34,12632064,10)
2	SYMBOL_POLYGON	PEN (1, 2, 8388608) BRUSH (16, 16776960, 16777215)
3	SYMBOL_MIXED	SYMBOL (34,12632064,10) PEN (1, 2, 8388608) BRUSH (16, 16776960, 16777215)
4	SYMBOL_LINE	PEN (1, 2, 0)

2.11. Change MapInfo Styling for a Table

Please refer to MapInfo documentation for information on the correct values for the styles you require.

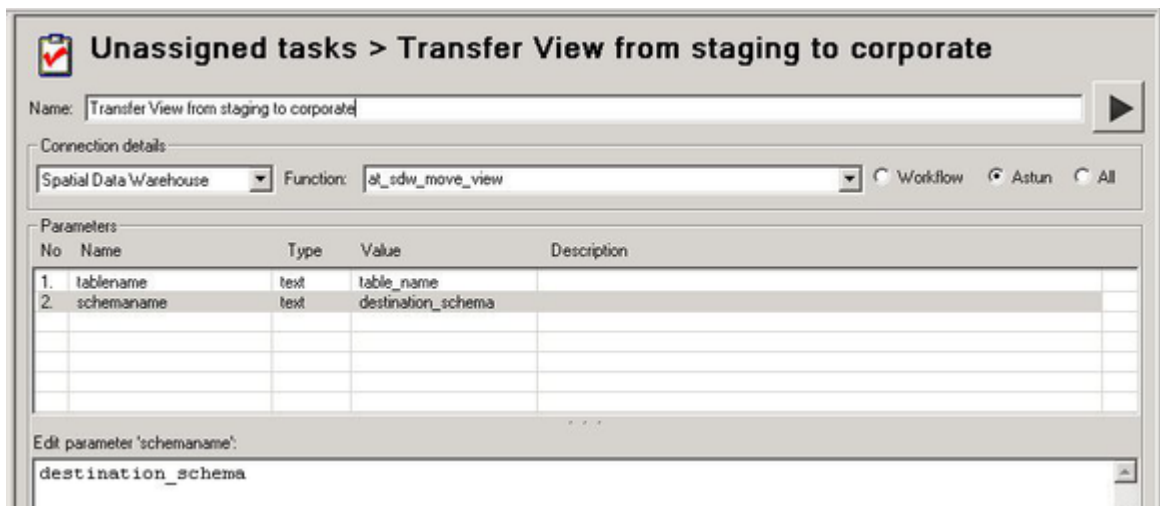
- Open pgAdmin III and connect to PostgreSQL as a user with admin role.
 - Expand the node for your SDW, expand the Schemas entry, expand the mapinfo schema, expand the Tables.
 - Right click on the MAPINFO_MAPCATALOG and select Scripts > UPDATE Script to open the SQL Editor.
 - Now change the script to update the entry you require making sure that you only select the table and schema that you wish to update e.g. WHERE TABLENAME='testuse_table' and OWNERNAME='planning'.

2.12. Create a User View

A user can create a view in staging just like a table. They can do this through pgAdmin III, psql or through the DB manager interface of QGIS.

2.13. Move a Staging Schema View to a Corporate Schema

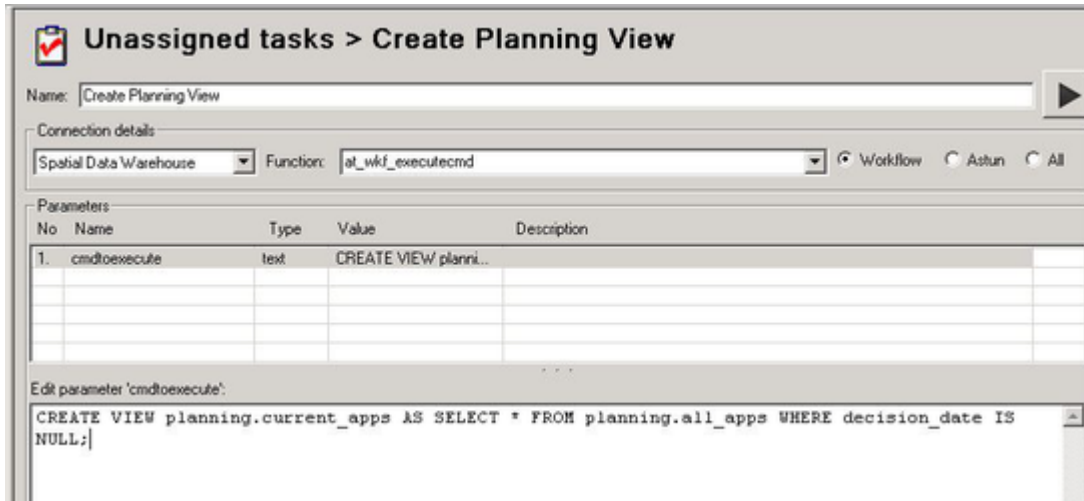
- Open Studio
 - Expand the Jobs node, right click on Unassigned tasks and select New Task.
 - Right click on Unassigned tasks and select New Task.
 - Create a Workflow Stored Procedure Task and give it a Name e.g. Transfer View from staging to corporate
 - Select the Spatial Data Warehouse Connection, Click on the Astun radio button and select the Function at `_sdw_move_view`.
 - Select the **tablename** parameter and enter the name of the *view* you wish to move in the **Edit parameter** box. Now select the **schemaname** parameter and enter the name of the destination *schema* you wish to transfer to e.g.



- Run the task. Click **OK**
- Check in pgAdmin III to see if the View has been created.

2.14. Create a View in a Corporate schema

- Open Studio
 - Create a Workflow Stored Procedure Task and give it a Name e.g. Create Planning View
 - Select the Spatial Data Warehouse Connection, Click on the Workflow radio button and select the Function at `_wkf_executecmd`.
 - Select the **cmdtoexecute** parameter and enter the CREATE VIEW statement into the **Edit parameter 'cmdtoexecute'** box e.g.



Unassigned tasks > Create Planning View

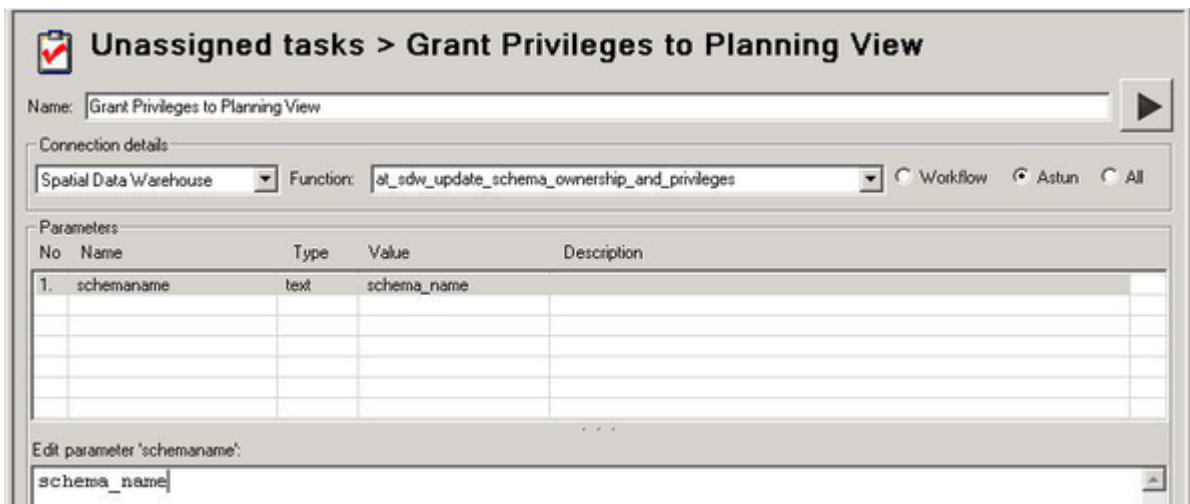
Name:

Connection details:
 Spatial Data Warehouse | Function: at_wkf_executecmd | Workflow Astun All

No	Name	Type	Value	Description
1.	cmdtoexecute	text	CREATE VIEW/ planni...	

Edit parameter 'cmdtoexecute':
 CREATE VIEW planning.current_apps AS SELECT * FROM planning.all_apps WHERE decision_date IS NULL;

- Run the task. Click **OK**
- Now we need to grant privileges to this view.
 - Create a Workflow Stored Procedure Task and give it a Name e.g. Grant Privileges to Planning View
 - Select the Spatial Data Warehouse Connection, Click on the Astun radio button and select the Function at_sdw_update_schema_ownership_and_privileges.
 - Select the **schemaname** parameter and enter the name of the schema where you created the view into the **Edit parameter 'schemaname'** box e.g.



Unassigned tasks > Grant Privileges to Planning View

Name:

Connection details:
 Spatial Data Warehouse | Function: at_sdw_update_schema_ownership_and_privileges | Workflow Astun All

No	Name	Type	Value	Description
1.	schemaname	text	schema_name	

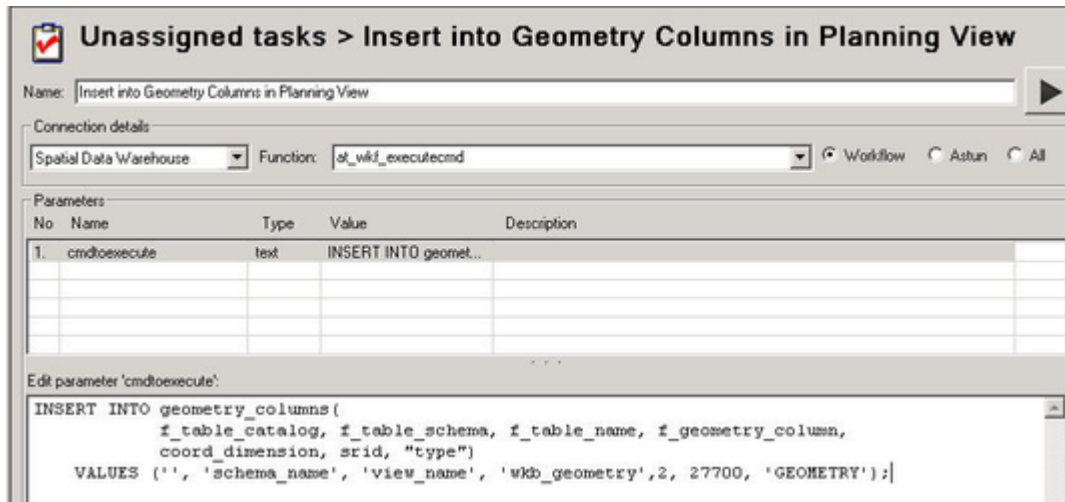
Edit parameter 'schemaname':
 schema_name

- Run the task. Click **OK**
- In PostGIS 1.5 a row will also need to be inserted into the **geometry_columns** table via an INSERT statement before GIS clients such as **QGIS** and **MapInfo** will be able to see the view.
 - Create a Workflow **Stored Procedure** Task and give it a *Name* e.g. **Insert into Geometry Columns in Planning View**
 - Select the **Spatial Data Warehouse Connection**, Click on the **Workflow** radio button and select the *Function* at_wkf_executecmd.
 - Select the **cmdtoexecute** parameter and enter the following INSERT statement into the **Edit parameter 'comdtoexecute'** box e.g.

Example INSERT Statement

```
INSERT INTO geometry_columns(
    f_table_catalog, f_table_schema, f_table_name, f_geometry_column,
    coord_dimension, srid, "type")
VALUES ('', 'schema_name', 'view_name', 'wkb_geometry', 2, 27700, 'GEOMETRY');
```

Replace '**schema_name**' with the name of the schema where you created the view and '**view_name**' with the name of the view. The "**type**" could also be POINT, LINESTRING, POLYGON, MULTIPOINT, MULTILINESTRING, MULTIPOLYGON, GEOMETRYCOLLECTION.



- Run the task. Click **OK**

2.15. Load a Non-spatial table into the SDW

Non-spatial tables may be required from DataShare Connections or Spatial Data Transformation workflow tasks. A DataShare connection will always create the data in the public schema either of the local iShareData database or the SDW. A Data Share Connection in Studio will create a connection to numerous different sources. Syncing a Data Share Connection will migrate the data to a public table of the same name in the public schema of the local iShareData database. PostgreSQL commands are then used to move the table to the SDW database.

- Open Studio
- Create a Workflow Spatial Data Transformation, and name it something like "Import Planning CSV"
- Set the source data to the type Comma-Delimited Text File
- Import a CSV from the following folder:
 - D:\iShareData\Astun\Source Data\csv\surreyplanning>alerts\
- Set the output to the SDW database
- Set the tablename, in the form **schema.tablename** where the schema should be one the studio user has admin rights to, eg staging
- Check the "Force Geometry" box and choose **NONE** from the dropdown list

Unassigned tasks > Import CSV

Name: Import CSV

Source Data: Comma-Delimited Text File

Filename: D:\ShareData\Astun\Source Data\csv\Asure\planning\valets\planning_2015_06_26_2025.csv

Input encoding: UTF8

Output: SDW

Table: staging_planning_nonspatial

Options:

Projection as British National Grid Force Geometry: NONE

WHERE statement

Action:

Overwrite layer Append to layer Skip Failures

Expert mode:

Show expert mode

Additional parameters:

- Run task.

There are two functions for transferring non-spatial data to the correct schema. Choose **at_sdw_move_nonspatial_table** if you wish to delete the source table from the original schema, or **at_sdw_copy_nonspatial_table** if you wish to keep the source data in the original schema.

- Open Studio
- Create a Workflow Stored Procedure Task
- Select the procedure **at_sdw_move_nonspatial_table** and set the following parameters:
 - **schemasource**- the source schema for the table you created in the above task
 - **schemadestination** - the schema you would like to move the table to
 - **tablename**- the name of the table (this will be the same in both the source and destination schemas)

Unassigned tasks > Move non-spatial

Name: Move\ non-spatial

Connection details:

SDW Function: at_sdw_move_nonspatial_table

Parameters:

No	Name	Type	Value	Description
1.	schemasource	text	staging	
2.	schemadestination	text	grounds	
3.	tablename	text	planning_nonspatial	

Edit parameter 'tablename':

planning_nonspatial

- Run the task.
- Open pgadmin3 and verify that the table has been moved from the staging schema to the schema of your choice, and that the roles and privileges are correctly set.

