

SpatialXL Troubleshooting Manual

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Installation

1. When I install SpatialXL I do not see the SpatialXL tab appearing in Excel.

Sometimes the add-in is not activated in Excel. You can turn on this add-in by going to the File > Options > Add-ins > Manage Com add-ins > Go

You can then activate the SpatialXL add-in by making sure it is selected and pressing OK.

If your SpatialXL tab is still not appearing then contact support@primethought.biz for assistance.

2. When I run the SpatialXL installation, I get an error that complains about corruption.

This occurs with a slow internet connection and means that SpatialXL.exe has not downloaded correctly and that the download is corrupted.

To handle this, you have to simply re-download with a better connection. Using a program such as Free Download Manager also assists.

3. The prerequisites to installation from the Microsoft sites take a very long time to download and install.

This also occurs with a very slow internet connection. You can look for the prerequisites on the internet and install each separately, but the best solution is to make sure you have a good internet connection to do this installation and download with.

Viewing

1. When I open my workbook my sub- layers are not appearing under my main layer.

This can be a refresh issue. Clicking in the graphics pane (map area) and zooming in and out by mouse wheeling in and out will handle this refresh issue.

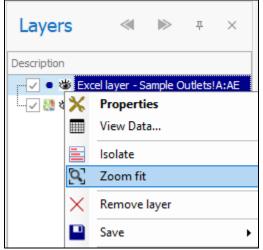
This especially tends to happen if there is an error in one of the layers.

2. I cannot see my data, but the hourglass is gone, so it seems the data has loaded and there are no errors on the layer.

Try the following options:

a) You might be **looking at a different area**, so if you **Zoom Fit** on the layer or on all the data, that might bring your data into view.

Right click | Zoom Fit on specific layer:



Use the Zoom Fit globes to optionally Zoom Fit currently highlighted layer or all layers:

Main View		
K @ Q 👀	👀 🤤 🕊 »> 🆩 🗫 👔 🔹	
4		
	1	
All layers	Currently selected layer	

b) There are invalid coordinates in your data. This is a very common reason for data not displaying as expected on the map. Look in the Long/Lat or X/Y etc. columns of your data and see that the coordinates are not switched around or maybe have an incorrect number in them such as from having a decimal point in the wrong place; all this would cause your data not to plot correctly. If there are blank coordinates these also would not plot.

In Excel worksheet:

С	D	E
CUSTOMER NAME	LONGITUDE 💌	
JOES PLACE	28,02779	-26,07409
CALTEX STARMART~ADOLFS	27,99758	-26,09934
SAVE RITE SUPERMARKET	27,954422	-26,060841
KWIKSPAR~ROBINDALE	27,99006	-26,11666
CHECKERS FOURWAYS MALL	27,966834	-26,023017
CALTEX~CUMBERLAND MOTORS	28,00514	-26,05349
CALTEX STARMART~LINKSFIELD	28,07754	-26,08532

In layer data grid:

Laye	ers	≪ ≫	1	Ψ ×		
Descriptio	on					
	🕸 Sar	nple Outlets				
	ð 🗙	Properties				
		View Data				
		Isolate				
	0	Zoom fit				
CODE	CUSTO	MER NAME		LONGITUDE		LATITUDE
=	RBC			=		=
39901	TOTAL	BONJOUR~GOLD.		27,96	708	-26,06886
39804	THE TH	ROBBING STRAW		27,99	338	-26,04047
39728	ULTRA	LIQUORS BLAIRG		28,00	224	-26,09306
39672	JOES P	LACE		28,02	779	-26,07409
39518	CALTE	X STARMART~AD		27,99	758	-26,09934
39500	SAVE R	TTE SUPERMARKE	Т	27,954	422	-26,060841
39040	KWIKS	PAR~ROBINDALE		27,99	006	-26,11666

- c) The coordinate column header names are incorrect. By default, our software recognizes the following column header names for coordinates and will automatically plot the data from those columns.
 - Long, Lat
 - X,Y,Z
 - Longitude, Latitude
 - Geometry (Well Known Text format)

If your coordinate column headers are named anything other than this, the software will not automatically recognize and plot the data for you and you would have to either change the coordinate column header names to one of the above or alternatively, specify the columns under Geometry Extraction in the Layer Properties:

Layers		«	đ	푸	×
Description					
🗸 💿 👹 Sa	mple (Dutlets			
	×	Properties		Î	
		View Data			
		Isolate			
	0	Zoom fit			

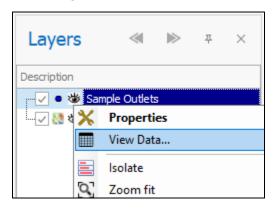
Layer Properties	- Sample Outlets	×
General		
Data	Layer type: Microso	oft Excel 2007/10/13/16 ~
Styling	Settings	
Text	Range:	Sample Outlets!A:AE
Thematics		Geometry Extraction
Projection		
Input Transform		
Event Scripts		
Editing		
All Properties		
	🗸 Autoload 🗌	Fit on Autoload 🔲 Dynamic Load
	Connections Ch	noosepredefined connection settings
Colour Palette		
ОК	Apply	Cancel

G	Geometry Creation Columns ×									
	Geometry Cre	eation: Point		~						
	Points									
	X Column:	X		~						
	Y Column:	Y		~						
	Z Column:	Z		~						
			ОК	Cancel						

d) You might **not** have **loaded data**, the file could be **empty** or could be incorrectly loaded.

To explore this option, you can open the data grid to see if there is any data in it.

Right click on layer | View Data:

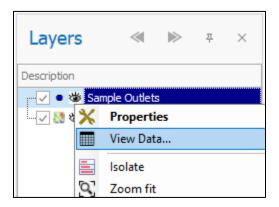


e) Your data might be so widely distributed that you cannot see any of it, because the points etc. might be too small over the entire area.

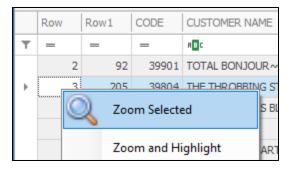
In this case you can open your data grid and zoom to one of the elements in the grid.

That way you can pinpoint where this element is without trying to see everything at the same time.

Right click on layer | View Data:



Right click on row | Zoom Selected/Zoom and Highlight:



3. The layer is loaded but the little eye next to the layer is closed.

If you have already set up layers before or are using someone else's layer, it might be that the data that you want to look at is not visible at the current display scale.

When you right click on your layer and you select Properties, the first dialog that you will see is the General Tab.

In here you can set the display from and to scale.

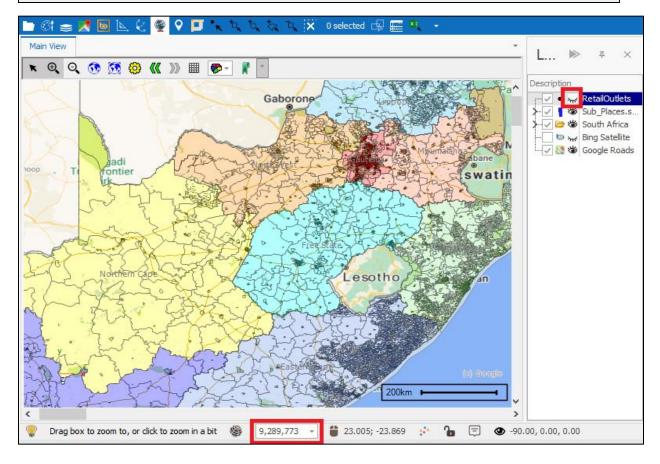
This is very useful to not clutter your map but check it if data is not visible or even loading at a particular scale!

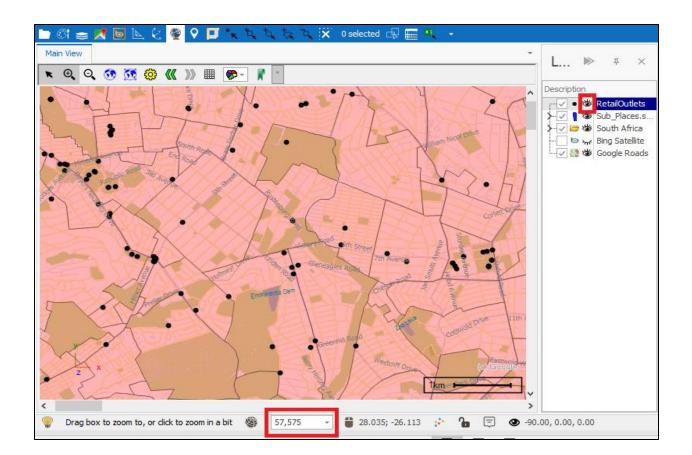
In the example below, my Retail Outlets are not visible (eye closed). I access the properties and see that the display from scale is set to 0 and the display to scale is set to 60 000. My current view scale is 9,289,773, so I am looking too high for this layer to load and be visible.

If I change my scale to below 60 000 or zoom into the map, my data will become visible.

The screenshots below illustrate:

Layer Properties - RetailOutlets ×						
General	Description: RetailOutlets					
Data	Display Layer (Will render on Map, otherwise just holds data) Reload					
Styling	Display from Scale: 0 🜩 to: 60,000 🌩					
Text	Transparency: - +					
Thematics						
Links	Selectable Snapable Editable Include in legend Background layer					
Projection	Mnemonic Display					
Input Transform	Image: Change Clear Dimension: 0					
Event Scripts						
Editing						
Colour Palette						
ОК	Apply Cancel					



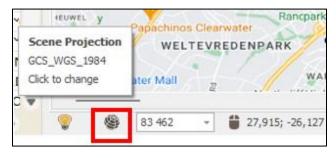


4. The data is looking strangely distorted or in the wrong position.

Check out your map projections.

Sometimes if you are trying to view data from one projection in another, the data looks distorted or appears in the wrong place.

You can control the scene projection with the black globe icon in the bottom left of the spatial pane:



You can control the projection for a specific layer by right clicking on the layer | Properties | Projection:

	Layers	a 🕨 🛱 X			
Image Projections View Data Isolate Isolate Layer Properties - Sample Outlets > General GCS_VIGS_1984 + SRID: 0 6 Data Well known text > SRID: 0 6 Styling Well known text > > 0 6 Projection Input Transform > > > > Editing All Properties Vise Manage Projections for sublayers Use Colour Palette Manage Projections for sublayers	Description				
View Data Isolate Layer Properties - Sample Outlets General GCS_WGS_1984 Data OWell known text Styling Text Thematics Projection Input Transform Event Scripts Editing All Properties Predefined layer projections: Use Manage Projections for sublayers		ample Outlets			
Isolate Layer Properties - Sample Outlets General GCS_WGS_1984 Data OWell known text Styling Text Thematics Projection Input Transform Event Scripts Editing All Properties Predefined layer projections: Use Manage Projections for sublayers		Properties			
Layer Properties - Sample Outlets General GCS_WGS_1984 Data Data Styling Text Thematics Projection Input Transform Event Scripts Editing All Properties Predefined layer projections for sublayers Colour Palette		View Data			
General GCS_WGS_1984 * SRID: 0 1 Data Well known text Styling Text Thematics Projection Input Transform Event Scripts Editing All Properties Predefined layer projections: Vuse Manage Projections for sublayers	=	Isolate			
Data Styling Text Thematics Projection Input Transform Event Scripts Editing All Properties Predefined layer projections: v Use Manage Projections for sublayers	Layer Properties	- Sample Outlets			×
Styling Text Thematics Projection Input Transform Event Scripts Editing All Properties Predefined layer projections: v Use Manage Projections for sublayers	General	GCS_WGS_1984	•	SRID: 0	•
Text Thematics Projection Input Transform Event Scripts Editing All Properties Predefined layer projections: V Use Manage Projections for sublayers Colour Palette	Data	🗍 Well known text			
Thematics Projection Input Transform Event Scripts Editing All Properties Predefined layer projections: Use Manage Projections for sublayers	Styling				
Projection Input Transform Event Scripts Editing All Properties Predefined layer projections: V Use Manage Projections for sublayers	Text				
Input Transform Event Scripts Editing All Properties Predefined layer projections Use Manage Projections for sublayers	Thematics				
Event Scripts Editing All Properties Predefined layer projections Use Manage Projections for sublayers	Projection				
Editing All Properties Predefined layer projections: V Use Manage Projections for sublayers	Input Transform				
All Properties Predefined layer projections Use Manage Projections for sublayers Colour Palette	Event Scripts				
Colour Palette	Editing				
Colour Palette	All Properties				
Colour Palette					
			Use		
OK Apply Cancel	Colour Palette				_
	OK	Apply Cancel			

Note: Whatever the layer projection may be, this gets projected on the fly to whatever your scene projection is set as.

5. There is a red x next to the layer.

This is an error message.

Right click on the layer and go to Properties. The error message will be displayed:

	b Places.svu		
	Properties		
	View Data		
	Isolate		
9	Zoom fit		
×	Remove layer		
Layer Properties	- Sub Places.svu		×
General	Description: Sub Places.svu		
Data	Display Layer (Will render on Ma	p, otherwisejust holds data)	Reload
Styling	Display from Scale:	0 🜩 to: 6 000 000 🜩	
Text	Transparency: -	+	
Thematics	🗸 Selectable 🔽 Snapable 🗌 E	ditable 🖌 Include in legend 🔲 Background layer	
Projection	Read Only Data Read Only		
Input Transform	🕑 Publish 🛛 🔽 Publish Readonl	y 🔽 Publish Data Readonly	
Event Scripts	Mnemonic Display		
Editing	Image: Change	Clear	
All Properties	Last Error:		
	Could not find file 'C:\Users\Ma \Example Workbooks\Sub Plac	arkDiamond\OneDrive - PrimeThought Software Solution es.svu'.	ns CC
Colour Palette			
ОК	Apply Cancel		
	- Appry Conten		

In this example, it cannot find the path of the layer as the original source file it is referencing was moved.

This is a common error and to fix it you will simply repath to the correct location by going to the Data tab in the Layer Properties window, then browse to the correct location using the three little dots to the right of the file path:

Layer Properties	- Sub Places.svu	×
General		
Data	Layer type: SpatialVU File	~
Styling	Settings	
Text		
Thematics	SVU File Base Folder:	
Projection	SVU File Path: Sub Places.svu	
Input Transform	Columns:	Brow
Event Scripts		
Editing		
All Properties	Protection	
	Optimize SVU File Geometry Extraction	
	Autoload Fit on Autoload Dynamic Load Connections Choosepredefined connectionsettings:	~
Colour Palette		
ОК	Apply Cancel	

6. My 3D data is not looking completely 3D, I can see through objects that are in front or the objects do not appear in the right order.

This is an issue with the renderer that you are using. Try flipping to the DirectX renderer.

This renderer is not good for 2D data or big amounts of data and can give an error on some machines depending on the strength of the graphics card.

So remember to flip back to GDIPlus when you don't need to use the DirectX renderer anymore.

To change renderers, go to Scene Properties:

Mai	n Viev	N									
ĸ	⊕	O,	•	6	٥	«	»»		۳	K	*
Scene Properties											

Scene prop	erties	×
Display	Background Colour:	Flip colours same as background
Projection	Show Axes:	
Perspective	Renderer:	GDIPh ~
Performance	Fill mode:	OpenGL GDIPlus
Editing	Show Crosshair:	DirectX
Coordinate Grid	Crosshair colour:	
Scene Tips	Crosshair radius (mm):	3,0
Legend/Scale	Crosshair thickness:	1 🗘
	Draw time limit (s):	3 ‡
	Save for all scenes	Apply OK Cancel

Selection

1. When I try to select my data, the mouse does not hook anything.

This can happen with the GDIPlus renderer sometimes, because GDI does not always draw in the true order.

You can try panning back out of the scene a bit.

You can also try putting on the DirectX renderer, but do not use this option with 2D only data and large amounts of data.

Changing renderers is done in Scene Properties:

Main View Main View Control C				
Scene prop	erties			×
Display	Background Colour:	25) Flip colours same	e as background
Projection	Show Axes:	\checkmark		
Perspective	Renderer:	GDIPlus \sim		
Performance	Fill mode:	OpenGL GDIPlus		
Editing	Show Crosshair:	DirectX		
Coordinate Grid	Crosshair colour:	Red 👻		
Scene Tips	Crosshair radius (mm)	: 3,0 🜲		
Legend/Scale	Crosshair thickness:	1 🗘		
	Draw time limit (s):	3 ‡		
	Save for all scenes	Apply	ОК	Cancel

Performance

1. My data loads very slowly or even runs out of memory when I load.

There can be a few reasons for this, these are the most common reasons:

 a) Large datasets: If you are trying to load a large dataset, imagine loading an 8 Gig dataset on a machine that has only 2 Gig memory! (8Gig RAM is the minimum required to use SpatialXL effectively)

One of the ways of dealing with this is to set your layer properties to dynamically load the data.

In this way, only the data in the viewing range will be loaded.

Set a layer to dynamic load by going to Properties | Data | then tick on 'Dynamic Load' option and set the 'Max Dynamic Records':

Layers	۲		푸	×
Description				
🐨 🔽 🔹 😻 Sample Outlets				
	View Dat	a		
	Isolate			

Layer Properties	- Sample Outlets	X 🔍 🔍 🗱 🛛 se
General		
Data	Layer type: Microsoft Excel 2007/10/13/16	<u> </u>
Styling	Settings	entre
Text	Range: Sample Outlets!A:AE	
Thematics	Geometry Extraction	
Projection		
Input Transform		
Event Scripts		ri 🖓
Editing		
All Properties		NSTON
	🗌 Autoload 📄 Fit on Autoload 🖉 Dynamic Load Max Dynamic Records: 20 000 🖨	
	Connections Choosepredefined connecti Only load data for area being viewed dynamically.	
Colour Palette	Used to browse otherwise too large data sets. Note that for database layers the query will need to be cons	tructed appropriately.
ОК	Apply Cancel	

Another way of dealing with this is to go to your source data and split this into smaller bits so that you are for instance only viewing files much smaller than your memory limitation.

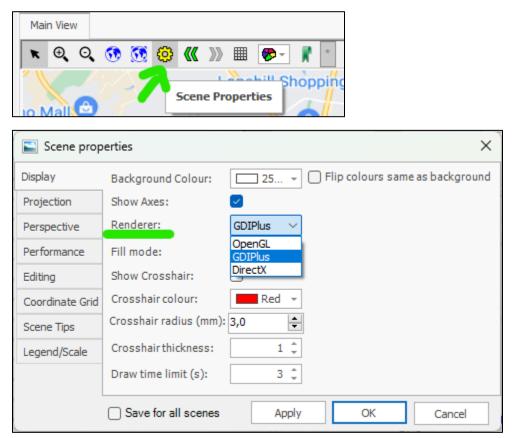
You can also see what type of data you are trying to load. 3D text elements for instance are very expensive as drawing operations.

You also do not always need to use the 3D text. Export the data without these elements from the source data.

b) **Wrong renderer**: If you are trying to view map data with a DirectX renderer, instead of GDIPlus, there could be a performance problem.

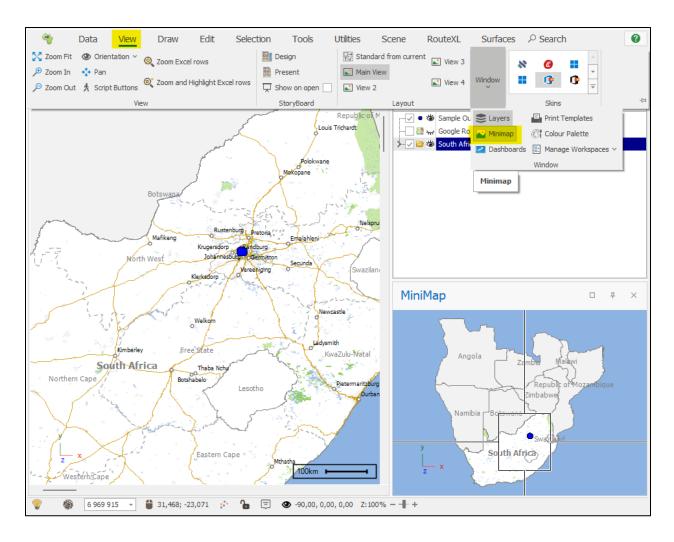
DirectX is more 3D orientated and for smaller sets of data. Flipping your renderer should handle this issue.

Changing renderers is done in Scene Properties:



c) **Mini map**: Your mini map is a proper rendition of the scene. Turning it off can enhance performance.

Turn off the Minimap window in the View tab, under the Window group:



d) **Not much memory**: If your PC does not have much memory, for instance only 1 Gig, and you are trying to look at sizable files.

Getting a more powerful machine or increasing memory will help with that. (8Gig RAM is the minimum required to use SpatialXL effectively)

e) **Images**: Some image file formats such as Tiffs, JPEGs, and so forth uses contiguous memory (memory has to be in one chunk).

This means that even with more memory, images even of 50 MB might load very slowly or you may even run out of memory.

This does not occur with Erdas images for example because the memory handling for these image formats is much better.

A very powerful machine with lots of memory will help.

2. Which layer properties should I set for optimum loading?

Layer Properties	- Sub Places.shp		×		
General Data	Layer type: ESRI Shapefile		~		
Styling	Settings				
Text Thematics	Shape File Base Folder:				
Projection	Shape File Path: C	:\Users\MarkDiamond\PrimeThought Software Solutions CC\Desiree Diamond			
Input Transform	Columns:				
Event Scripts					
Editing All Properties					
	Autoload Fit on Autoload Dynamic Load				
Colour Palette	Connections Choosepre	redefined connection settings	~		
ОК	Apply Ca	ancel			

Autoload or dynamic load.

Autoload: Autoload being turned on will cause SpatialXL to automatically load the layer data. You can choose between Autoload and Dynamic Load.

Fit on Autoload: Will cause a zoom fit of the layer data after it's been loaded.

Dynamic Load: In cases where the dataset is very large (such as SA Road data) this option will load only the portion of data that is being looked at. This only applies to SQL Server and Shape file layers. You can choose between Dynamic Load and Autoload. Please note that Dynamic Load only works for Shape Files and SVU files, no other format.

General handling

A general one size fits all handling that can be used for any issue you may be experiencing with SpatialXL is to hold down the Shift key when starting the program (before clicking "Show SpatialXL" and all the while holding it down until SpatialXL has fully loaded); this will do a software reboot.

