

Edit Tab Guide

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Delete	Paste	Edit
Undo	Paste at cursor	Move
Redo	Add feature and keep original	<u>Union</u>
Copy Selected	Add feature and delete original	Intersection
<u>Subtract</u>	Group	<u>Ungroup</u>
Copy with Offset/Tx	Trim	Augment
<u>Split</u>	Split in place	

The **Edit** tab is found in the ribbon of all our spatial products, with it you can do various editing operations:

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👆 Undo	🛱 Paste	63	Add Feature a	nd Keep o	original 🖒 Move	🔘 Subtract			•	ᢞ Split linestrings	Split in place	
Aedo 🥟	Paste at curs	or 🖾	Add feature ar	nd delete	original 🔘 Union	🖸 Group	며 Copy	with Offset/Tx	🖰 Augment	睯 Split Surfaces		
				Edit	Tools				Polygons	Split		^

Edit Tools

We will start by taking up the **Edit Tools** section of the tab: Edit Tools



Firstly, to be able to do any editing make sure that the layer is editable by going into its layer properties and making it editable:

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Description		
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		View Data
		Isolate
	0	Zoom fit
	\times	Remove layer
		Save +

Layer Properties	s - Points	×
General	Description: Points	
Data	Display Layer (Will render on Map, otherwise just holds data)	
Styling	Display from Scale: 0 🔹 to: 6 000 000 🔹	
Text	Transparency: - +	
Thematics	🖉 Selectable 🖉 Snapable 🖉 Editable 🗹 Include in legend 🔲 Background layer	
Links	Read Only Data Read Only	
Projection	🗹 Publish 🛛 Publish Readonly 🔽 Publish Data Readonly	
Input Transform	Mnemonic Display	
Event Scripts	Image: Change Clear	
Editing		
All Properties		
Colour Palette		
OK	Apply Cancel	

To delete any elements in your scene, select the element/s with one of the selection tools and then click **Delete**:



To undo and redo any editing actions done, click Undo or Redo:

AB	Data Vi	ew	Draw	Edit	Se	lection	Tools	Utilities	RouteXL
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🥐 Redo	🖺 Paste at curso	or 🐹	Add feature a	nd delete o	riginal	🔘 Union	🤨 Group	며 Copy	with Offset/Tx
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To copy an item or items in the scene, first select them with one of the selection tools then click **Copy Selected**. The item/s can then be pasted in one of the other tool dialogues where geometries are asked for or just back in the scene using **Paste**, this will paste it at the exact same point it was copied, to paste it at some other point in the scene use **Paste at cursor**:



To add an element from one layer to another and still keep the original in the original layer, first make sure to have the layer you are adding to selected in the Layers Description box, then select the element in the scene and click Add Feature and Keep original, note that this just adds the geometry to the other layer and doesn't add any data or styling along with it:





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If you don't want to keep the original when adding the feature then select Add feature and delete original:





Using the **Edit** tool you can edit geometries in the scene, first click on the tool, then when you hover in your scene you will see the **Edit** crosshair, click on the geometry you want to edit with this crosshair and you will see handles come up now at the vertices of the geometry which you can drag and move around to alter the element, when done altering just click off the element and the element has now been edited:

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👆 Undo	🔓 Paste		🕼 Add Fe	ature an	d Keep original	📫 Move	🔘 Subtract		
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What you can also do is right click on one of these vertex handles and you then have options to insert or delete etc. vertices in the element, for example I will insert a vertex here:







With the **Move** tool you can change the position of elements in your scene relative to some base point, first select the element/s then open the tool and the following dialogue comes up:



Moving object		x
Coordinates of Centroid:	-214.68 234.79 -70.40	Pick
Base Point:	0.00 0.00 0.00	Pick
Direction from base point	-214.68 234.79 -70.40	Step: 1 ~
Distance from base point	:325.84 Bearing: 132.44	Zenith: -12.48

Coordinates of Centroid are the X,Y and Z coordinates of the centroid of the selected object/s that you will be moving. These are automatically populated here but you can pick the coordinates of the centroid as well by ticking on **Pick** and then clicking at the appropriate point in the scene:

Moving object		x
Coordinates of Centroid:	-214.68 234.79 -72.40	Pick
Base Point:	0.00 0.00 0.00	Pick
Direction from base point	-214.68 234.79 -72.40	Step: 1 ~
Distance from base point	326.28 Bearing: 132.44	Zenith: -12.82

Base Point is the coordinates relative to which distance and direction are calculated, to choose your base point tick on **Pick** and then click at the appropriate point in the scene:

Moving object			×
Coordinates of Centroid:	-214.68 234.79 -72.40	Pick	
Base Point:	0.00 0.00 0.00	Pick	
Direction from base point	-214.68 234.79 -72.40	Step:	1 ~
Distance from base point	:326.28 Bearing: 132.44	Zeni	th: -12.82

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Direction from base point is the direction vector from the base point to the object/s you are moving. **Distance from base point** is the distance of the object/s from the base point. **Bearing** is the azimuth, in degrees, of the coordinates of your object/s from base point and **Zenith** is the zenith angle, in degrees, of the coordinates of your object/s from base point:

Moving object		×
Coordinates of Centroid:	-214.67 234.80 -72.38	Pick
Base Point:	-9.26 -23.15 0.00	Pick
Direction from base point	-205.41 257.96 -72.38	Step: 1 ~
Distance from base point:	337.60 Bearing: 128.53	Zenith: -12.38

All these values can be changed manually by entering them in. You can also animate by clicking in one of them and mouse wheeling, you will then see the object/s moving gradually as you wheel. **Step** is by how much you want the value to change in animating:

Moving object		x
Coordinates of Centroid:	-214.67 234.80 -72.38	Pick
Base Point:	-9.26 -23.15 0.00	Pick
Direction from base point	-205.41 257.95 -72.38	Step: 1 V
Distance from base point	:337.59 Bearing: 128.53	Zenith: -12.38

As an example, I will now animate the values of the **Bearing** by mouse wheeling, and you will see the position of the object change:

Moving object		×
Coordinates of Centroid:	191.33 238.56 -72.38	Pick
Base Point:	-9.26 -23.15 0.00	Pick
Direction from base point	200.59 261.71 -72.38	Step: 1 ~
Distance from base point	:337.59 Bearing: 52.53	Zenith: -12.38



Union will create a new single object out of the union of two or more intersecting objects; first select the two objects in your scene, then click **Union**. The new object will be drawn to whatever layer is active and if there are none it will prompt you to create a new layer:



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Redo Reste at cursor	Add feature and	delete original	O Union	Group	비금 Сору и	with Offset/Tx
		Edit Tools				





Intersection will create a new object out of the intersection of two or more objects. First select the objects in your scene, then click the tool, the new object will be drawn to whatever layer is active, if there are none you will be prompted to create a new one:



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Subtract will create a new object from the subtraction of an intersecting object or objects, this will be the first selected object minus the others. First select the objects in the scene and then click the tool, the new object will be drawn to whatever layer is active, if there are none you will be prompted to create a new one:



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Group will group two or more objects into one as a geometry collection, first select the objects in the scene and then click the tool, the new object will be drawn to whatever layer is active, if there are none you will be prompted to create a new one:



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Indo 🖺 Paste 🥂 Add Feature and Keep original 🚽 Move 🔘 Subtract	
🥐 Redo 🛛 🛱 Paste at cursor 🐹 Add feature and delete original 🍩 Union 🎉 Group	句 Copy with Offset/Tx
Edit Tools	



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Columns	😢 Delete	Q Zoom and Highlight	📘 Un Highlight All	🚦 Un Highlight Selected	Copy Html	_		
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To ungroup this new object, you can select it and then click **Ungroup** and it will be broken back in to separate objects, first select the objects in the scene and then click the tool, the newly separated objects will be drawn to whatever layer is active, if there are none you will be prompted to create a new one (the original grouped object will still remain):









Copy with Offset/Tx allows you to copy and paste an object with a specified offset or transform, this newly pasted object is pasted to whatever layer is active and if none you will be prompted to make one. First select the object/s then click the tool which will bring up the following dialogue:



Edit Tools

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In the **Shift** tab you can specify an offset for X,Y and Z. **Select Copy** will unselect the original object and select the newly pasted object, this allows for repetitive shifting. As an example of pasting with a shift/offset I will copy and paste my object with a 100 meter offset on the X,Y and Z axis, as soon as I click **Copy** it is copied and automatically pasted to whatever layer is active:

Copy w	ith offset/Transform	x
Shift	General	
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Z Sł	nift: 100.0000	
Sele	ct Copy	
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In the **Transform** tab you can specify a transform for the object that will be pasted. To insert a transform right click in the white box and go to **Insert**, here you can choose from a range of transforms, in this example I will do a **Rotation**:

Copy with offset/Transform					
Shift	General				
Transfor	ms		Details	Edit as:	~
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Copy with offset/Transform						
Shift Gen	eral					
Transforms		Details	Edit as:	~		
	Move Down	Ctrl+Down				
	Move Up	Ctrl+Up				
	Insert		•	Survey to Cartesian		
Select Co	Remove			Uniform Scale		
	Clear			Scale		
	Load File	Load File		Shift		
	Save			Rotation		
	Save			General		
[Save Group			From File		

Copy with offset/Transform		x
Shift General		
Transforms	Details	Edit as: Rotat $ \smallsetminus $
Rotate 45.000 about Y axis	Axis: Angle:	Y ∨ 45.000 ►
Select Copy		Сору

As you see here I will be copying and pasting with a rotation of 45 degrees around the Y axis. I click **Copy** and my object has been copied and pasted with the transform:



You can save these transforms to file either individually or as a group. Load File will load a group of transforms saved, but to load a single saved transform you would use **From File**:

Copy wit	h offset/Transform	x
Shift	General	
Transform	ns Details	Edit as: Rotat \checkmark
Rotate 4	Move Up Ctrl+Up	Y ✓ 45.000 ≑
	Insert	Survey to Cartesian
Select	Remove Clear	Uniform Scale Scale
	Load File Save	Shift Rotation General
	Save Group	From File

Polygons

褑 Trim		
🏷 Augment		
Polygons		

Trim allows you to trim polygons by drawing an intersecting polygon. First, select the polygon/s you want to trim, then click on **Trim** and it will be greyed showing the tool is now active, then you can start drawing your intersecting polygon in the scene to trim as desired, when finished drawing double click to end and your polygon has been trimmed:









Augment allows you to augment a polygon/s by drawing a polygon that adds to the selected polygon. First, select the polygon/s, then click on the tool and it will be greyed to show it is now active, then draw the augmenting polygon:









Split



In the **Split** section of the tab, you can do splitting operations on polygons, linestrings and surfaces. **Split in place** will remove the original item after the splitting operation is done, otherwise the item is split but the original unsplit item is also kept, you can toggle this on or off, when on it is greyed. To split, first select the item, then click on the appropriate splitting tool and it will be greyed to show it is now active, then click in your scene to start drawing an intersecting line that will split your item, double click to finish drawing and your item has been split:







Important: when splitting polygons, you need to make sure you draw the intersecting line in such a way that it is as close to a closed polygon shape itself as possible. The reason for this is so that the software knows exactly how to split your original polygon shape. Just drawing a straight intersecting line through a polygon, especially if the polygon is quite complex, and even if you want the cut to be straight, will not split it properly. So make sure to start drawing the intersecting line well outside of the original polygon, give it a few vertices, then cross through the polygon in the way you want it to be cut, and then exit outside of it again fully giving it a few more vertices. Support



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