

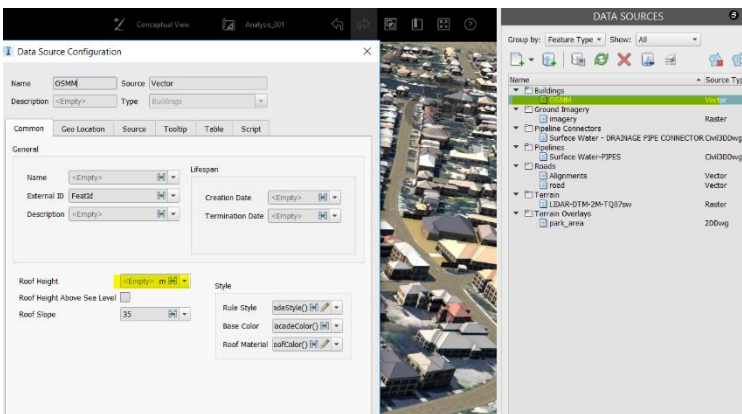


The major advantage of using software such as InfraWorks is being able to link intelligent data in a graphical way. The amalgamation of data from sources such as Ordnance Survey (OS), <https://www.ordnancesurvey.co.uk/>, the government open source portal <https://data.gov.uk/> with our model objects allow us to carry out analysis to our model very simply and easily.

Applying styles and matching them to a style rule set allows us to select specific objects and display them to show pertinent themes applicable to the scheme being developed. This is invaluable when sharing the model with non technical stakeholders.

In the following example OS building height data has been applied to the building models which is followed by developing a set of rules that allow us to display the buildings accordingly.

After importing the OS data in, you need to configure the data. This can be done simply by double clicking the data source.



The image on the left shows the data source highlighted in green and one of the data parameters that has come with the OS data. In this case we are dealing with Roof Height. We are presented with a dropdown menu where we can select different parts of the building to base our object height on. You should remember that InfraWorks really just carries out an extrude to the polygons when imported and that could be the generic height chosen by the user or in this case the actual height supplied by OS.

Figure 1 Object Configuration Options



The image to the left is courtesy of OS and shows the abbreviations used to denote specific heights on a building. These are matched when you drop down the roof height in the configuration options as shown in figure1. Just select the appropriate option.

Figure 2 Image Courtesy © Ordnance Survey 2017





Once you have selected the roof height option, it then needs to be applied to all the objects in the models.

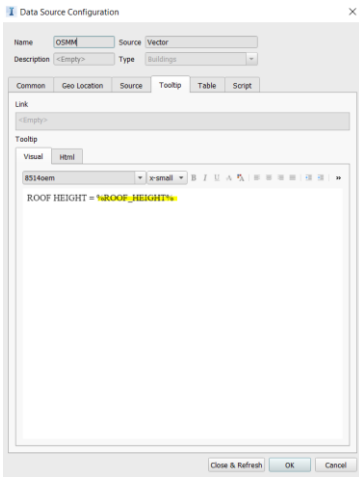


Figure 3 Tooltip Dialogue Tab

Applying the height information is just a case of going to the Tooltip tab and inputting your requirements. A tip is to enter % into Link box, InfraWorks will then list all of the different options to display in this case its Roof_Height. I then copy down into the area as shown in figure 3. The information can then be accessed by hovering over a particular building.

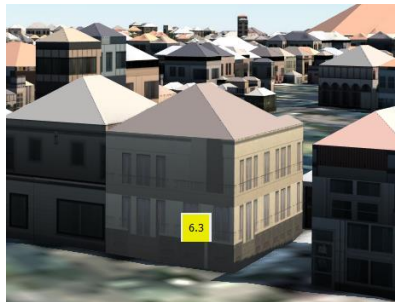


Figure 4 Showing Height to Base of Roof

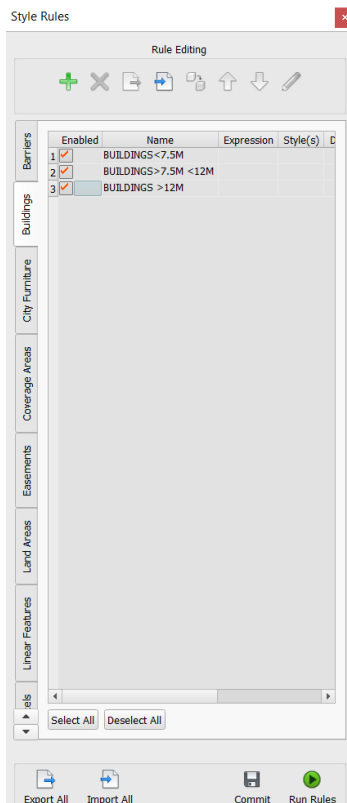


Figure 5 Rule Dialogue Box

Once the Style Rule palette is open select the Buildings Tab and hit the + button to create a new rule. Name your rules in as straightforward a way as possible so that it reflects the rule(s) action. Once you have created your list the expressions need to be built. In this case double click your first rule which will open a Rule Editor. Give the rule a description and then build the expression.

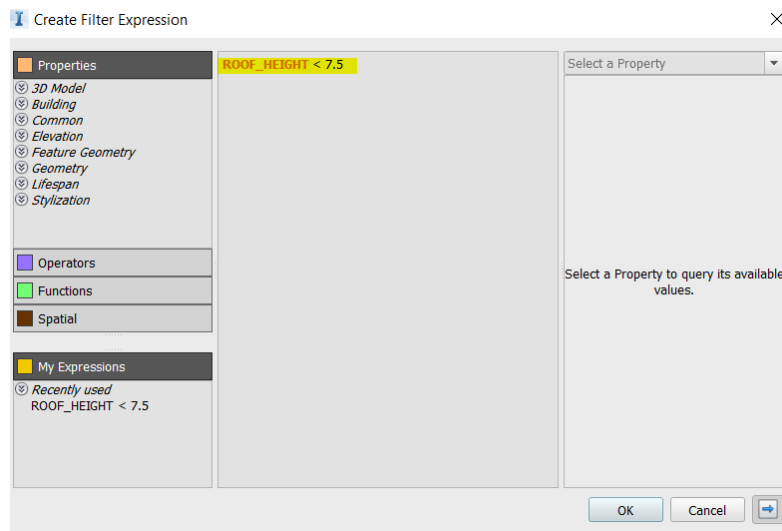
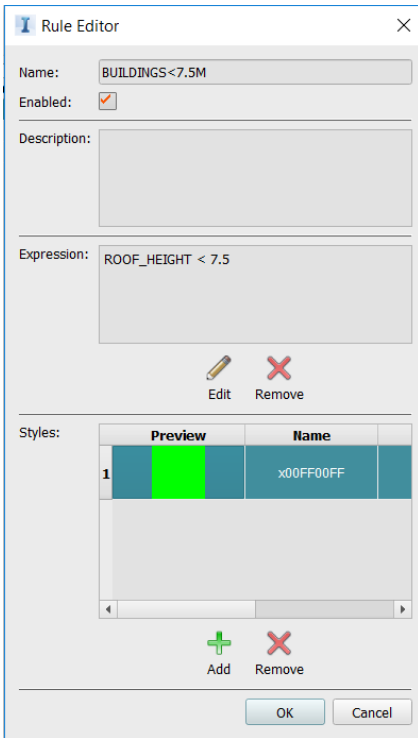


Figure 6 Expression Editor





Once the Expression is complete without errors, a style needs to be created to the rule to show how that particular rule is displayed. There are options of materials or colour.



Continue until the rule set is complete.

It is simply a case of running the rules by selecting the “Run Rules” button on the bottom of the Rule Editing Panel.

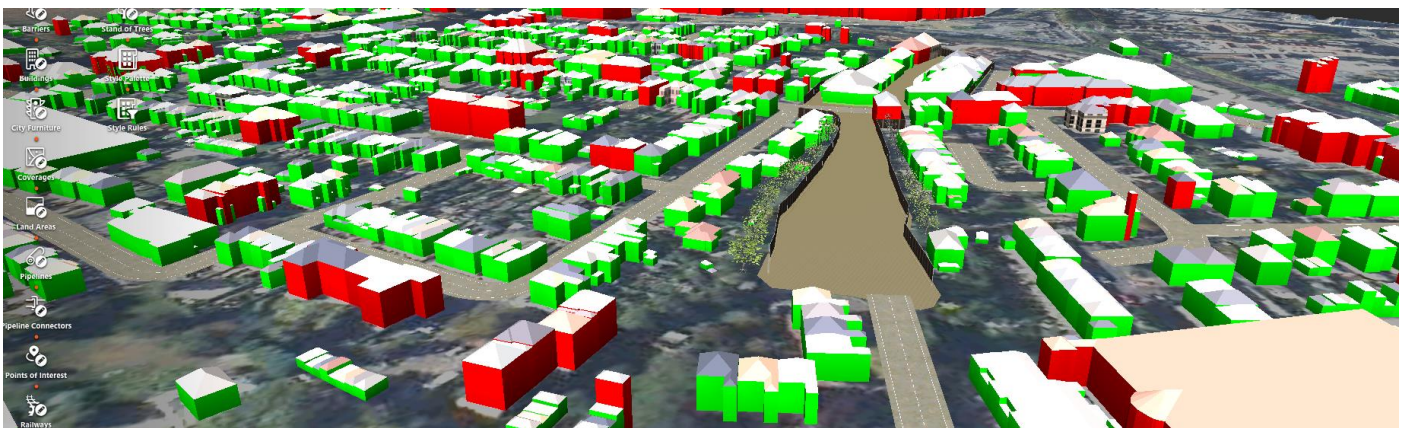


Figure 7 Very Simple Rule Set displayed