



6. How to add shaded areas to a map with varying colours

This example shows how to open a Mapping job previously created and add a layer of boundary areas representing numerical data.

Your systems made brilliant

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PLATFORM: webSNAPS v3.4

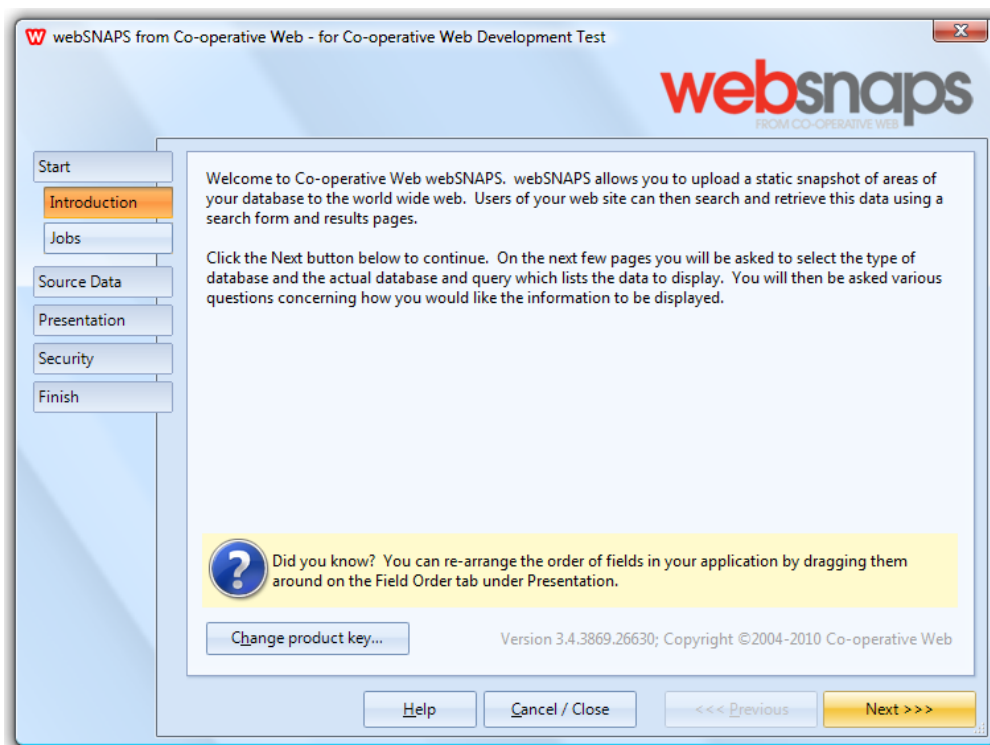


1. PRE-REQUISITES

1. Follow the instructions in Example 5 – "How to create a map with shaded areas" first.

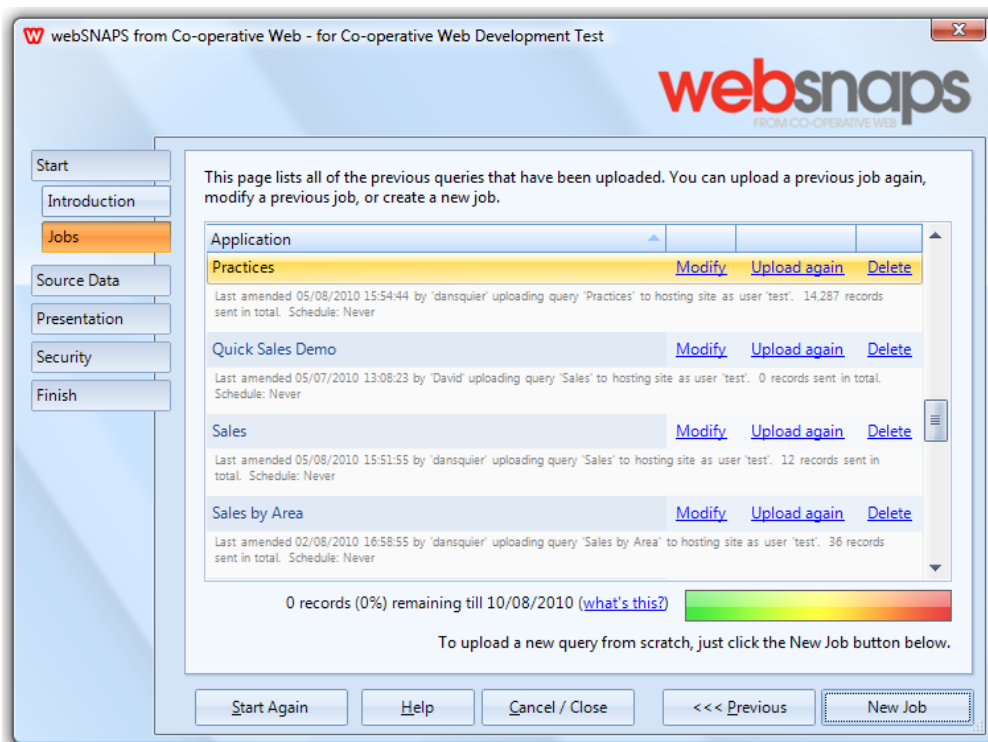
2. LOAD THE JOB WE'RE GOING TO WORK ON

1. **Open the 'Co-operative Web webSNAPS Desktop Client' tool**, which you should find in the Start menu under 'Programs' and then 'Co-operative Web'. If the tool is already open from a previous job, click the "Start Again" button to restart it.
2. **Click the "Next >>>" button** in the bottom-right corner to move to the Jobs page.



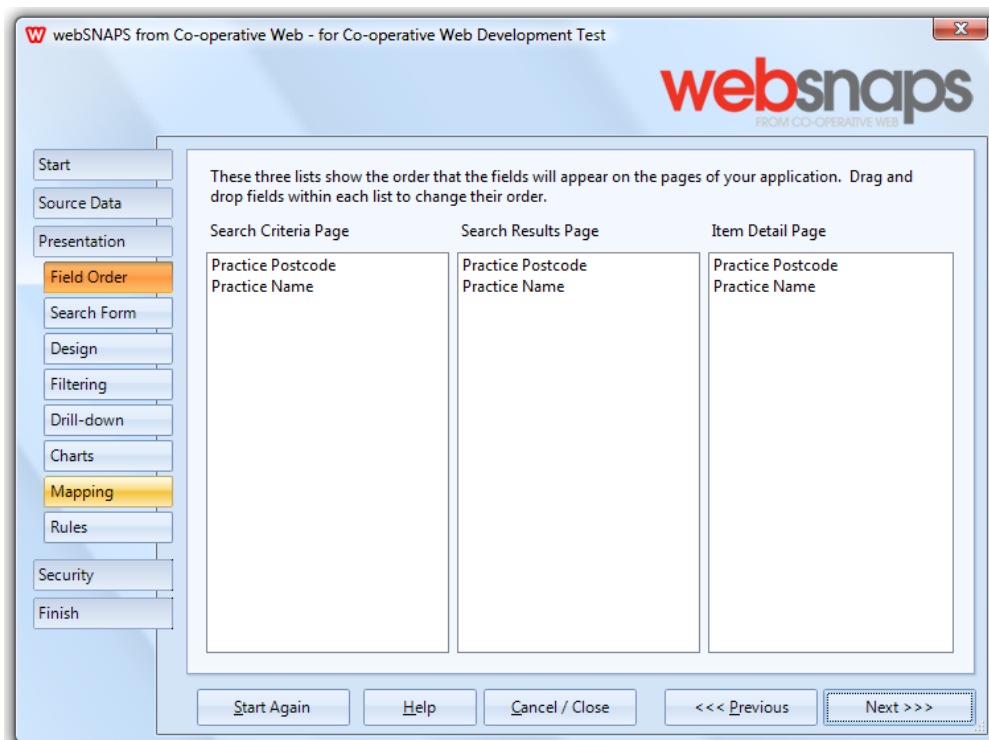
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3. Click the **“Modify”** link which is next to the “Practices” job that has already been created (in the example mentioned in the pre-requisites section).



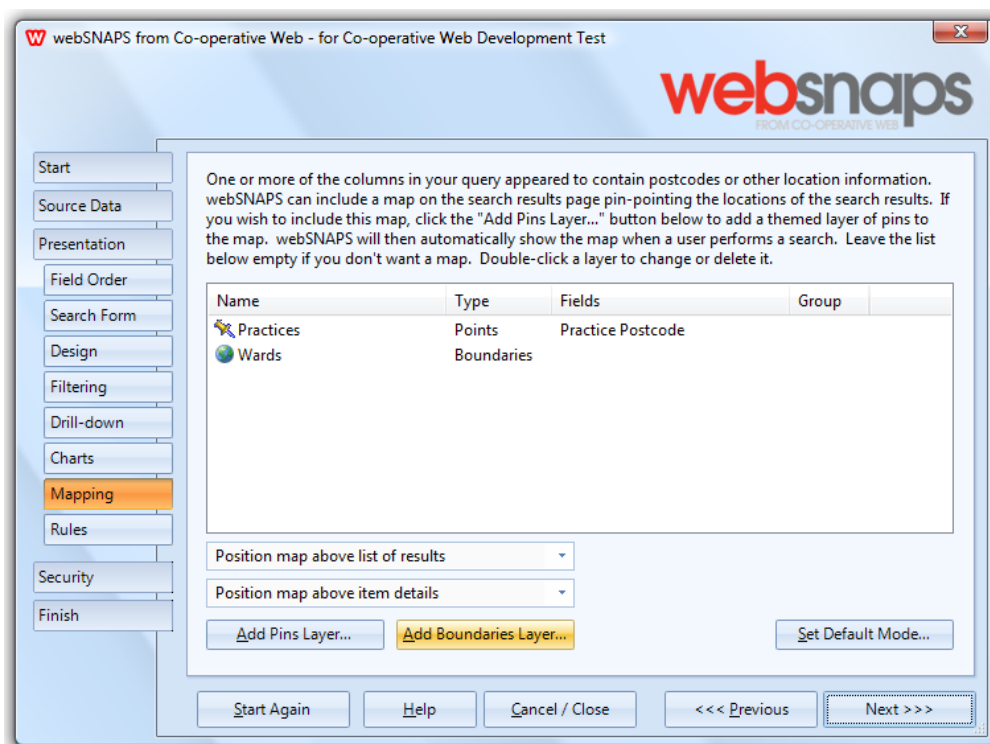
3. TO ADD A LAYER OF MAP BOUNDARIES WHICH VARY IN COLOUR BASED ON NUMBERS IN YOUR DATA

1. We're only going to change the Mapping settings and leave everything else as it was before, so **select the "Presentation" group from the column on the left and click the "Mapping" button** to jump directly to the Mapping settings.



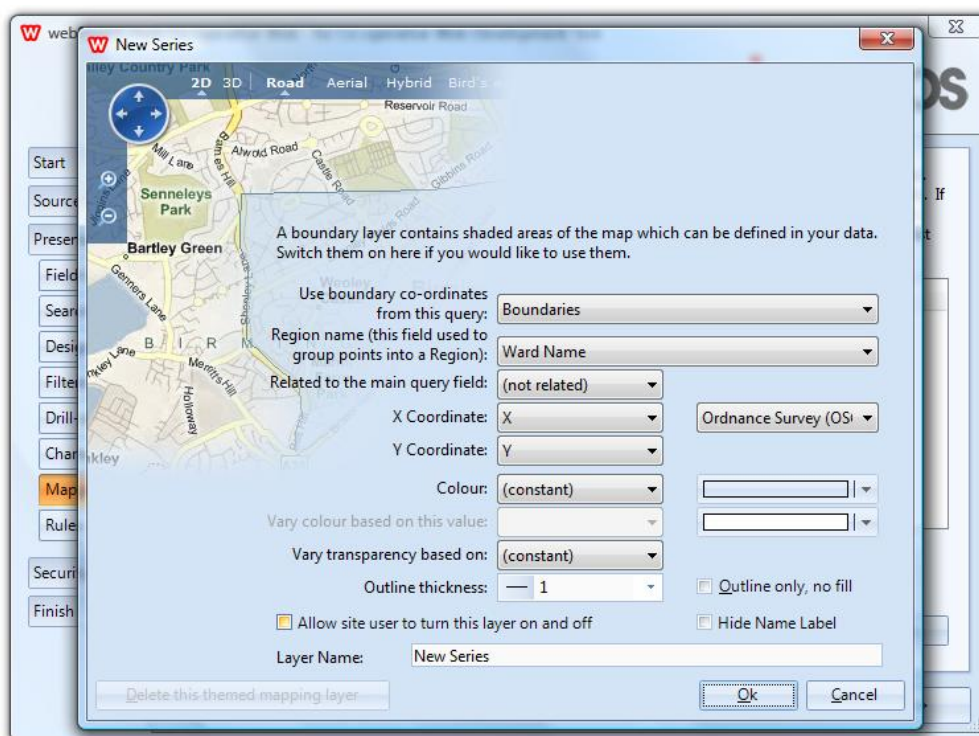
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2. Click the **"Add Boundaries Layer"** button to create a set of shaded areas (also sometimes known as "regions" or "boundaries"). Boundaries are outlines that identify an area on the map.



3. Choose the **"Boundaries"** source query from the drop-down at the top. This query contains the co-ordinates of the boundaries.
4. Choose the **"Ward Name"** field from the **"Region name"** drop-down. Now is a good time to open Microsoft Access and take a look at the results of the Boundaries query. Your boundaries query will contain several records for each boundary. Each record will contain the X and Y co-ordinates of a point on the boundary. A line is drawn around all of these points to form the boundary. websnaps knows how to group several records together to form one boundary because there is a column (called "Ward Name" in this example) containing the name of the area that each co-ordinates record is associated with. This is the field that you are specifying here in the "Region name" drop-down.
5. Choose the **"X"** field from the **"X Coordinate"** drop-down and the **"Y"** field from the **"Y Coordinate"** drop-down. These are the two columns of your query that contain the X and Y co-ordinates for each boundary point. It is really important that these fields contain co-ordinates that are valid in the requested co-ordinate scheme. Take a look at the Boundaries query in the sample Microsoft Access Database for an example of correct OS numeric co-ordinates. The underlying websnaps engine can import co-ordinates from other schemes - so get in touch with us for more help if you have data in another scheme.
6. Choose the **"Ordnance Survey (OSGB-36)"** value from the drop-down next to the **X Coordinate** drop-down. This is the co-ordinate scheme for the X co-ordinate.

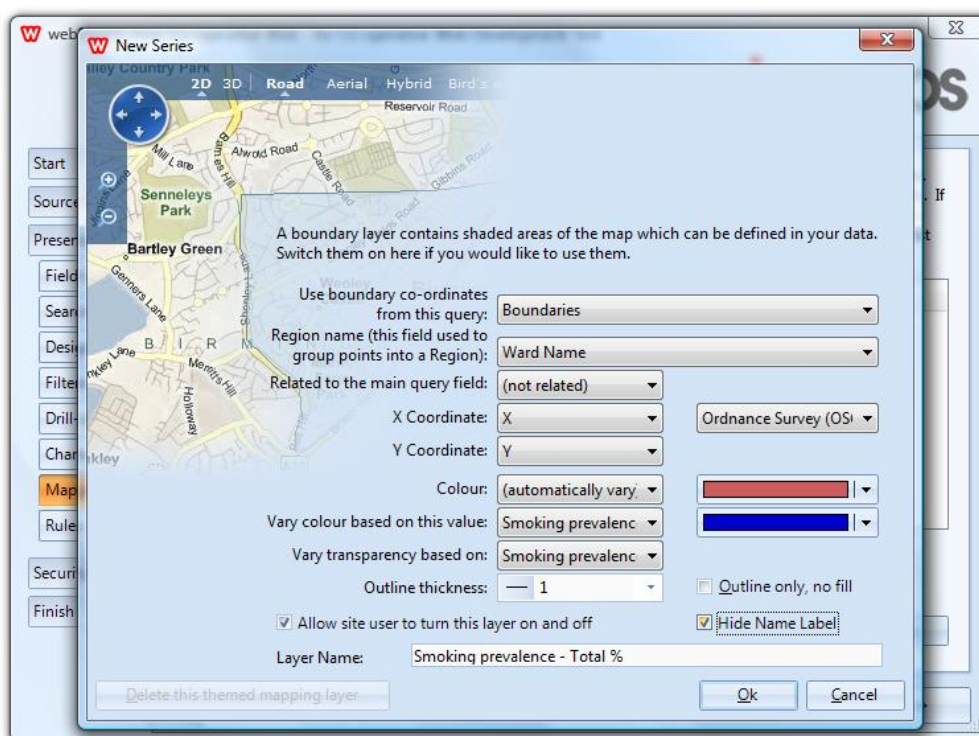
webSNAPS currently supports longitude and latitude WGS-84 co-ordinates (such as those used by GPS and American software) and also Ordnance Survey (OSGB-36) all-numeric co-ordinates. The sample data we're using here is given in OS numeric grid reference format (see http://en.wikipedia.org/wiki/British_national_grid_reference_system under the section "All numeric grid references" for more information).



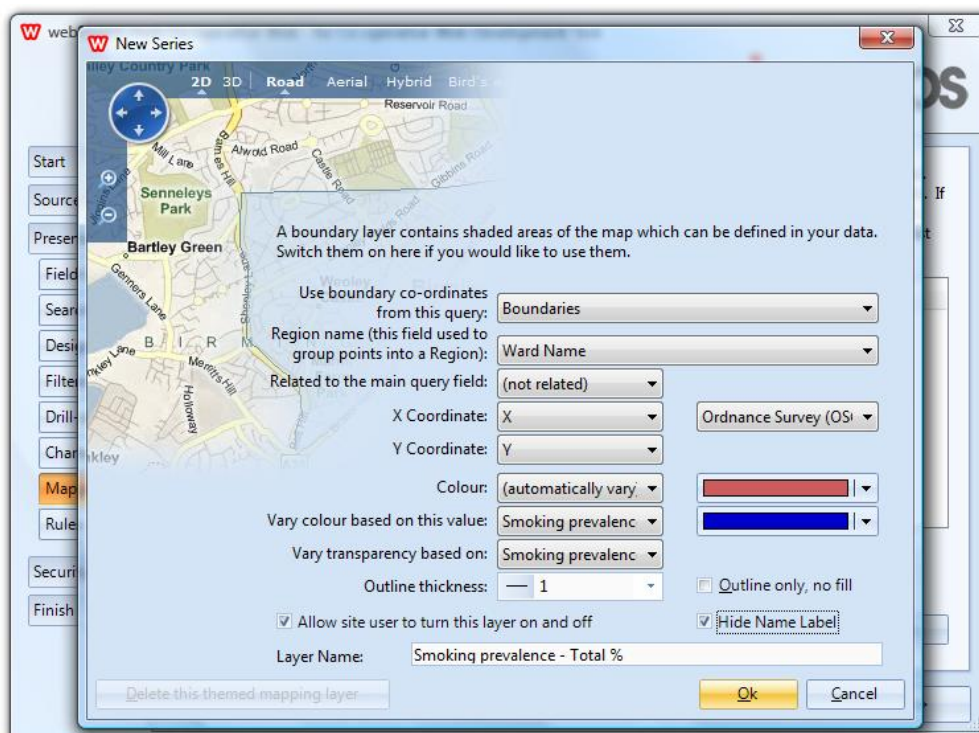
7. There are several different ways to shade map areas in. For this example, we will shade the boundaries in a different colour based on a statistic from the source data. **Choose "(automatically vary)" from the Colour drop-down** and then pick two colours from the Colour 1 and Colour 2 drop-downs. The colour used to shade each area will be somewhere between these two colours you choose here.
8. You need to tell webSNAPS which field in your source query contains the data that determines which colour an area should be. **Choose "Smoking prevalence - Total %" from the "Vary colour based on this value" drop-down.** The colour user to shade each area will now be the first colour for the maximum value of the Smoking Prevalence field and the second colour for the minimum value of the Smoking Prevalence field. Smoking Prevalence values in between the maximum and minimum values will be shaded in a colour in between the first and second colours.
9. If you wish, you can also make the shapes more transparent for lower values of a data field. To demonstrate this, **choose "Smoking prevalence - Total %" from the "Vary transparency based on" drop-down.** You could choose a different field, but to keep things simple we're going to use the same field that we've used to define the colour of each area.

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10. Type "Smoking prevalence - Total %" in the Layer Name box. This is a name of the layer of boundaries that we're adding to the map.

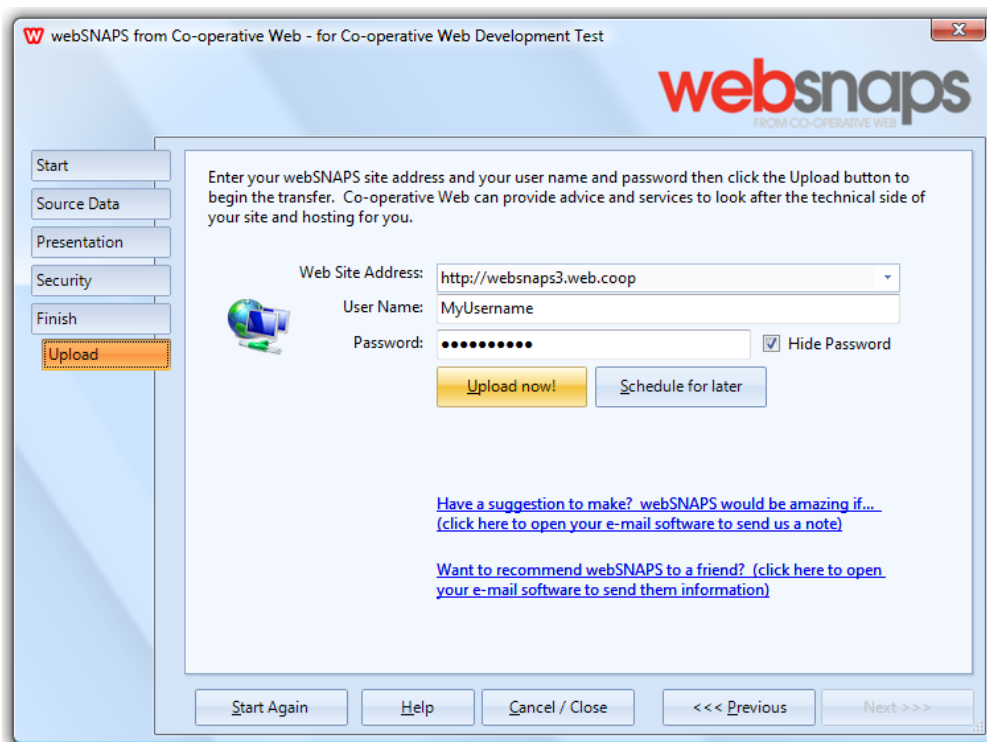


11. Click the OK button. This will save your changes and create the boundary layer.



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12. From this point on we will continue to accept webSNAPS' default settings, so just **select the "Finish" group from the column on the left and click the "Upload" button.** This will skip the remaining sections of the wizard and jump straight to the end. You can come back later to try out these areas if you wish.
13. You should now see the Upload tab (screenshot below). You will need to **fill in the Web Site Address, User Name and Password boxes** from information given to you when you purchased webSNAPS. Contact websnaps@web.coop for help. Then **click the "Upload now" button.**

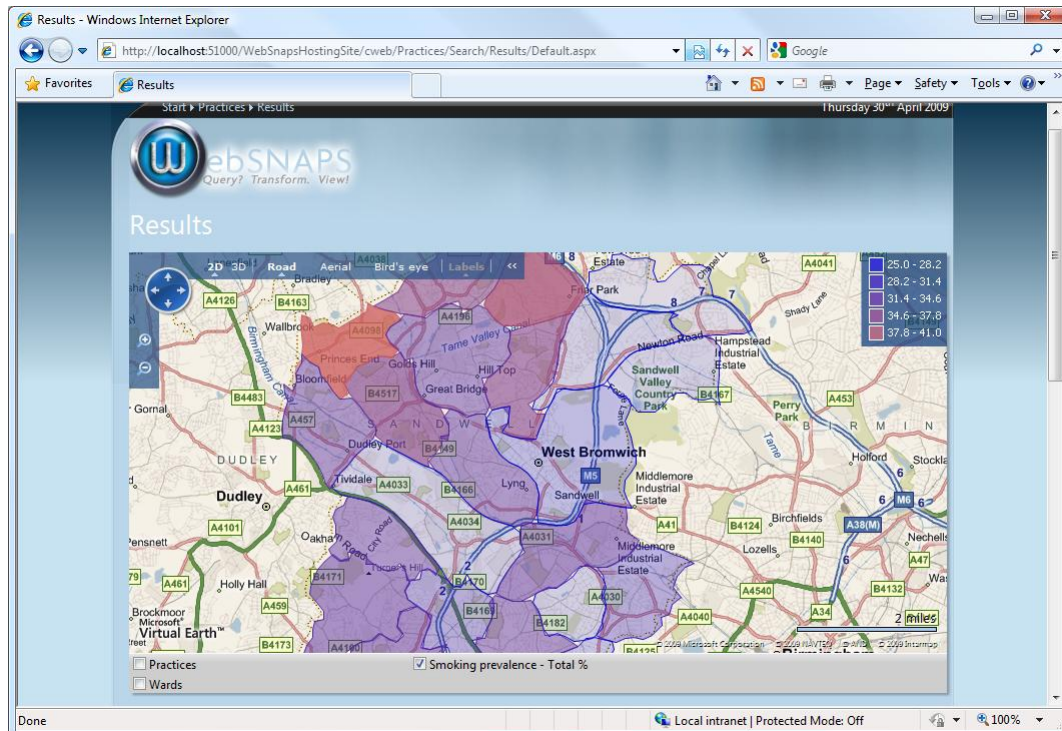


14. Answer "Yes" when asked if you'd like to open the new application in a web browser. And you're done!

4. RESULT

The resulting application will include a map on the search results page. Underneath the map will be three tickboxes showing the existing Practices and Wards layers along with our new "Smoking prevalence" layer. The user can toggle these tickboxes to turn these layers on or off on the map.

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Note that webSNAPS will automatically add a legend to the top-right corner of the map showing what each colour means. webSNAPS will choose numerical rounding that is appropriate to the data being presented (if it makes an assumption which you don't like... please let us know).

TIP: webSNAPS uses mathematical rounding which makes sense to people, rather than binary rounding which makes sense to the way computers work inside. So, for example, if webSNAPS decides that three significant figures are best then a data value of 44.229 will be rounded down correctly to 44.2 when displayed in the legend. When webSNAPS draws the map, it won't ignore your 44.229 value even if it appears to be outside of the range of values shown by the legend. It will still shade that bounded area in the correct colour for 44.2.