

Surrey Planning Hub – open source enabling infrastructure and API



Astun provides local authorities in Surrey with an open source infrastructure and API to aggregate and then publish live planning application data for the whole of Surrey via the web.

Planning information is perhaps the most commonly accessed data on any council website because planning decisions have an impact on people, communities, businesses, including developers, and organisations that provide services and facilities. The trouble is that this information is fenced in by local planning authority boundaries. This means having to access a number of different sites to get the full picture. To put the demand for planning data into perspective quarterly statistics from a selection of authorities in Surrey showed that over 30% of all web enquiries related to planning applications.

In Surrey there are 11 District and Borough councils whose Chief Information Technology Officers (SCITO) have endorsed the concept of a Surrey Digital Service (SDS), a 'data commons' for Surrey. In the planning context this translates into a vision of a pan-Surrey data feed of live planning information harvested from every district council, accessible from a single website. This would enable access to seamless planning data across the whole County and kick-start the SDS programme.

Surrey and beyond

What might have been a great idea for Surrey however could be a much bigger idea if there was a standardised way of publishing planning data, one that could be used by any local authority.

Today that has been achieved thanks in no small part to the Surrey GIS Forum which is made up from representatives from the Districts, Police and County Council. This group has also linked up with a group from Hampshire County Council which is pursuing a similar goal; together the groups have established a standard data schema for planning information, which is now backed by the LGA's Incentive Scheme¹. The scheme already has over 90 registered local authorities. With this standard schema in place it is possible to provide access to planning information across the county and beyond, first to Hampshire and then to other neighbouring areas. It is simply a matter of time and resources.

Open Data

The Surrey GIS Forum applied to the Department for Business, Innovation and Skills and Cabinet Office to take advantage of funding offered through the Open Data Breakthrough Fund. This supports the wider release, and use of public open data. With the funding in place the Surrey GIS Forum, turned to Astun Technology to help with the infrastructure and publishing requirements. In the spirit of open data, any development source code would be shared via the SDS website² and GitHub³ for use by others.

Astun used its expertise in data hosting to provide the base mapping for the prototype hub, this is OpenStreetMap in the first instance but OS OpenData is an alternative. A number of the Districts in Surrey are Astun clients and can already harvest and publish their planning data to the agreed data schema via iShare.

Building the hub and the web mapping API

For the hub itself a server was temporarily established in the Amazon Cloud; this will later be replaced with a server in the Surrey Data Centre. Astun then developed a data aggregation tool and API. The aggregation tool's open source code uses 'Flask' a lightweight web application framework written in Python. This receives the live XML data feeds from each authority. The API uses GeoJSON to enable third party web developers to run queries (search, sort and filtering) against the data. At the moment the hub is configured to return all current (undecided) applications and all applications decided in the last 30 days, however the API is flexible and the filtering options extensive.

¹ <http://incentive.opendata.esd.org.uk>

² <http://digitalservices.surreyi.gov.uk>

³ <https://github.com/AstunTechnology/planning-hub>

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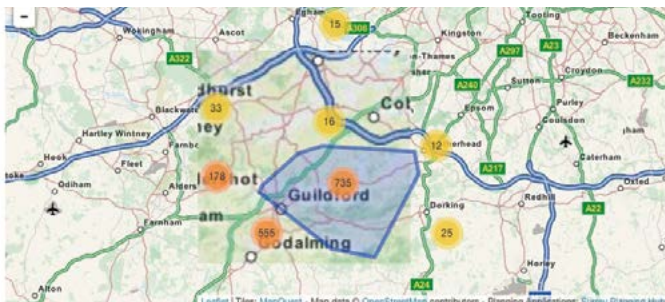
In addition Astun produced a mobile-compatible, gesture-responsive web mapping widget/API using the ‘Leaflet’ open source JavaScript library to deliver the results. The map can be embedded into any website using just 10 lines of code.

“With the Planning Hub we sought to create a live, pan-Surrey picture of planning information; before there was no way to see current and contiguous information across boundaries,” said Robert Steele from Mole Valley District Council and current Chairman of the Surrey GIS Forum.

“Astun Technology has proved to be an effective partner and we are delighted with progress so far. All software source code is made freely available via GitHub so now anyone wanting to replicate the Surrey Planning Hub can do so by following our Wiki, shared source code and the national data schema. Currently we have 6 live data feeds, covering the majority of the county. There has been plenty of interest in the project from Local Enterprise Partnerships (LEPs) covering Surrey and we are confident it will also be popular among local developers,” continued Steele.

Surrey Planning Hub sequence: <http://digitalservices.surreyi.gov.uk>

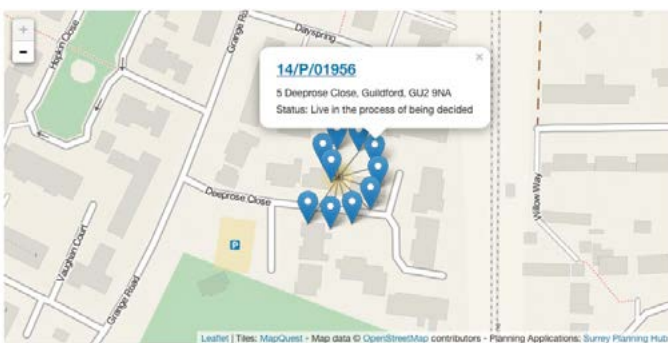
- 1 As you zoom into the map running the mouse over the circles highlights the polygon of the area – in this polygon there are 735 applications.



- 2 Zoom in further to localise the search.



- 3 A cluster of applications – click on the drop pin to reveal the link to the application.



- 4 The actual application on the Guildford Council website

