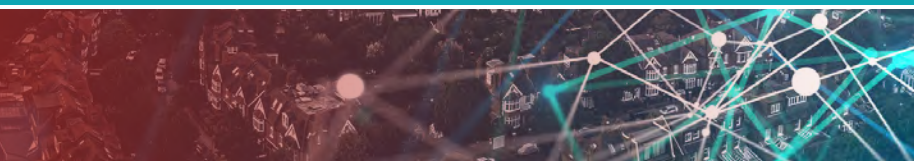




Walsall Council

iShare in the Cloud Enterprise - a more efficient use of resources



Walsall Council are utilising a cloud hosted enterprise Geographic Information System (GIS) to reduce the running costs of hosting and serving geospatial data to Council Officers and members of the public.

“ UTILISING RESOURCE EFFECTIVELY
Walsall's GIS Team is very small with just 2 people managing the data and applications for the whole organisation at a management and administrative level. This is challenging and why Walsall sought to implement a managed service to alleviate most of the burden of looking after servers, back ups, base mapping and updates.”



Walsall's ICT strategy recognises the importance of data that the organisation uses to underpin critical business applications. They also recognise the need to exploit this asset, turning data into intelligence to make informed decisions that achieve corporate priorities, whilst keeping data secure and infrastructure resilient and flexible.

Walsall approached Astun for help with their new vision, having been a customer of Astun Technology since 2015, when they chose to implement the award winning iShare Maps public facing mapping application and iShare GIS Intranet Mapping on premise.

Working closely with Astun Technology Walsall migrated their on premise solutions to a new cloud managed service.

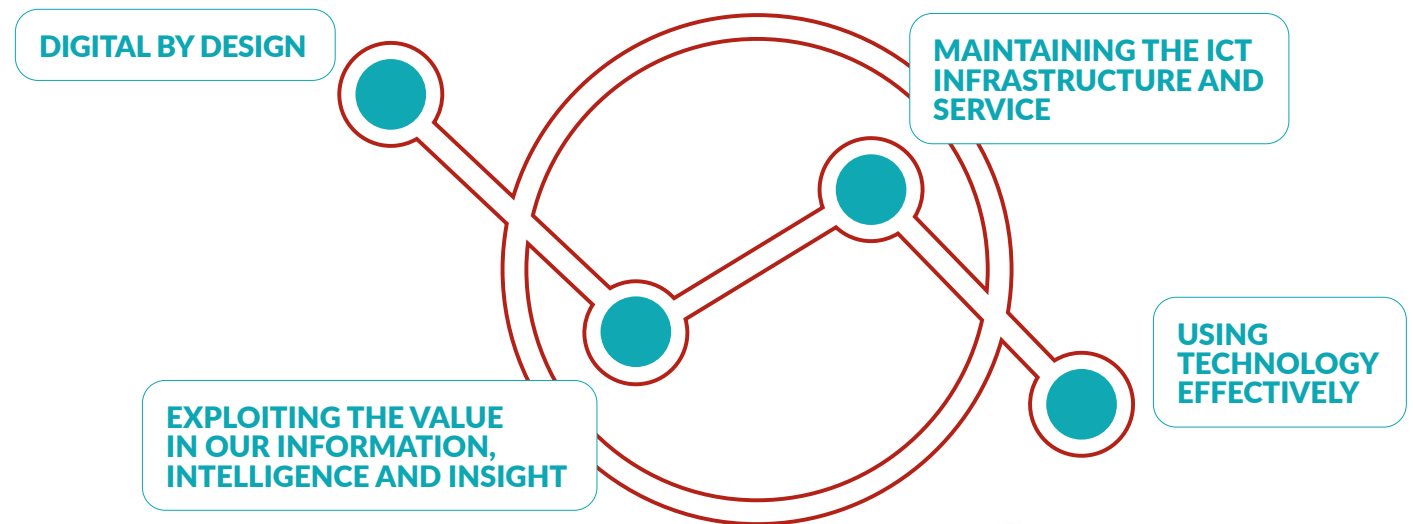
Walsall's "iShare in the Cloud Enterprise" environment is built on AWS (Amazon Web Services) in the UK and most importantly includes a spatial data warehouse and web mapping API to store and serve up Walsall's GIS and Address Data, which had previously been stored in flat files on servers.

The iShare Spatial Data Warehouse (SDW) and service capabilities of iShare enable the sharing of address and spatial data at multiple levels across the organisation. This means that a range, from high level 'super users' of professional GIS to intranet users and citizens at home, are accessing a single source of the truth.

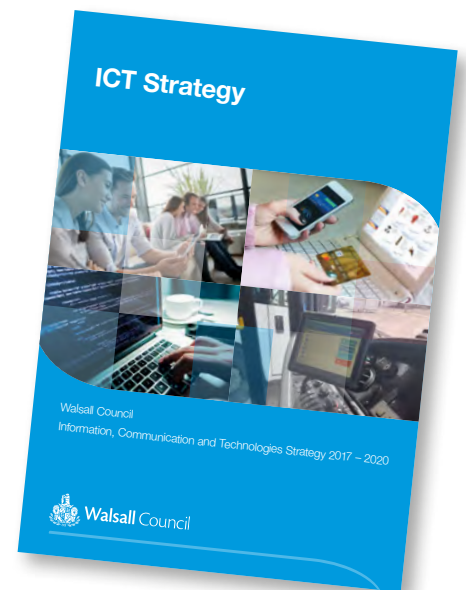
THE CHALLENGE

Walsall's ICT strategy has four distinct themes, using the principles of: Simplify, Standardise and Share.

Their four distinct themes are



Regeneration is a constant theme in Walsall as developments and opportunities are maximised to revitalise communities and create employment opportunities. The same is true for the council's computer systems with the aim of decommissioning aged network technologies, a move to cloud hosting and an increasing emphasis on managing the data the council collects, gaining value by turning it into information and adding intelligence to give knowledge and insight to improve the delivery of services.



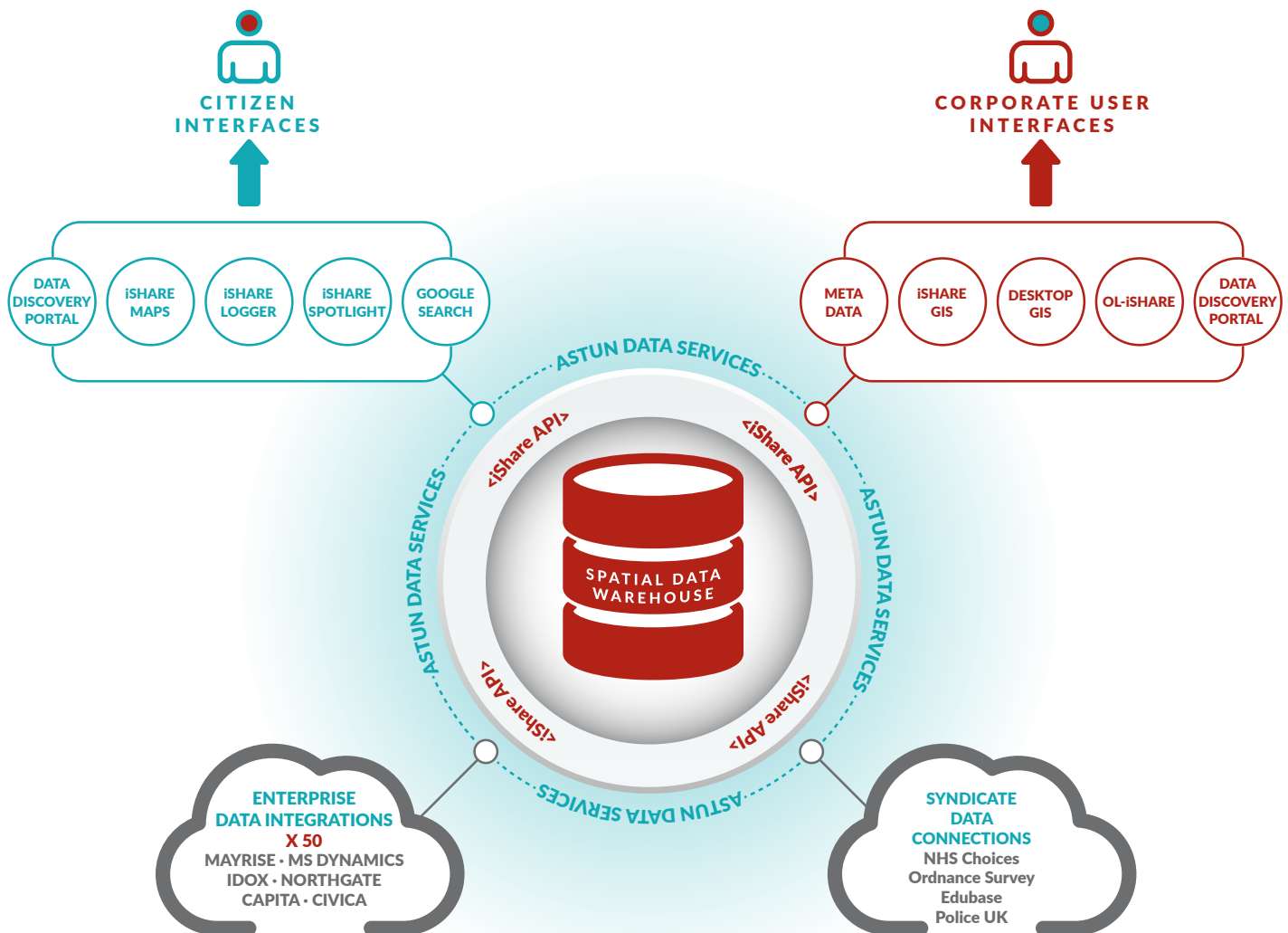
“
Why do we use web mapping in LAs?
Tracy Lister, Strategic Geospatial Development and Support Manager
Part of our objective is to encourage channel shift through the deployment of transactional web mapping systems enabling better decision making, by using geographic data integrated with back office data and sharing both internally and to the public for day to day service delivery challenges.
”

This strategy lends itself neatly to targeted applications of Geographic Information Systems (GIS) which allow corporate geospatial data to be stored in the cloud, blended together with third party data and analysed to target service delivery improvements.

Walsall has an established team of GIS practitioners and they were challenged to “Support the development of Channel Shift Business Case to develop a corporate approach to customer service delivery.”

THE SOLUTION

Working with Astun Technology Walsall chose to implement iShare in the Cloud Enterprise; a cloud hosted and managed service.



The solution provides an end to end Enterprise GIS including a spatial data warehouse, rich functionality intranet browser GIS (including editing, spatial querying and printing) and an award winning public facing mapping application with an API that enables organisations to share data with citizens and customers whilst reducing interaction costs.

Implementing iShare in the Cloud Enterprise will help to free Walsall from the costs and complexity of managing their own Geographic Information infrastructure (Desktop GIS servers, networks, bandwidth) and additionally from

the costs of loading and maintaining the comprehensive range of Geographic datasets available to the Council via the Ordnance Survey PSGA agreement including Addressing.

This will ultimately lead to freeing up capacity within the GIS team and allow the GI managers and analysts to focus on delivering Geographic Intelligence to the rest of the organisation leading to improved service delivery and enhanced management of their corporate assets.

THE OUTCOMES

With Astun looking after the servers and infrastructure, loading and maintaining the Ordnance Survey Data and providing consultative help and assistance, the GIS team were able to focus on specific projects that the authority was facing. Essentially getting out of the weeds of maintaining data and focussing on real life challenges.

Corporate addressing

One of the first challenges the team solved was to standardise the capture of addresses in service delivery. The team chose to use their LLPG for address searches within the authority boundary, and AddressBase Premium for national address searches. The data sets were chosen because of the currency of the LLPG (it's maintained by the council and changes every day), both datasets adhere to the BS7666 standard and they contain the Unique Property Reference Number (UPRN) which means other datasets can easily be matched to this primary key. Both flavours of the address data are served up by one of the iShare APIs and are now integrated into Foehn (Genysis cloud) - contact centre system and a Track & Trace Power App with integrations into Alloy (Highways Street works), and the Respond7 Customer complaints system on the way.

Integrating data from business systems

A second quick win enabled by iShare involved pulling in live data from Kaarbontech software which holds data on Council owned gritting bins. The team configured a live Web Feature Service (WFS) connection via iShare Studio which allows Council officers to understand when a grit bin was last inspected, how full it is, what type of bin it is and its current condition. The data can then be displayed in iShare which is available to all Council officers for visualising and interrogating the relevant datasets.

Matt Banks, Applications Support and Development Officer (Geospatial)

Making a connection in Studio was easy, the how to guides gave us a simple route to success and both the teams at Kaarbontech and Astun were on hand to help us get up and running. The whole process took less than a couple of hours giving our colleagues access to the valuable information.



Area info tool

Planning Services is a busy service for Walsall Council. Planning history and constraints need to be checked with every planning application or property purchase and with so much re-generation taking place in Walsall they are in high demand.

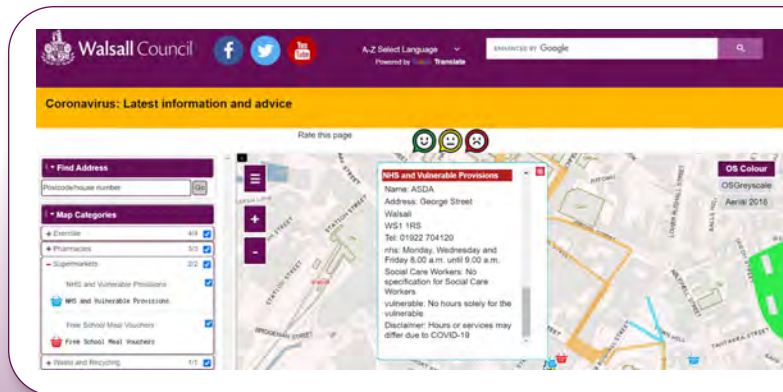
Because of the way iShare works, the product is built on Open Source Foundations, the GIS team were able to take advantage of some configuration work already undertaken by colleagues in Dudley Council. The team shared some code and a configuration file 'plug in' which allowed the iShare GIS system to interrogate all the planning constraint layers and pull together a Planning report - effectively a drill down tool for planning officers to automatically populate their planning system with the relevant information.

“**What is the “area info” tool?**
A custom plugin tool for iShare GIS was configured to report on planning constraints. This same tool is planned to be used to gather intel on vulnerable people when a disaster requires response and for Highways Emergency situations. The plugin allows the user to generate a report from dozens of layers of data within a specified polygon.”

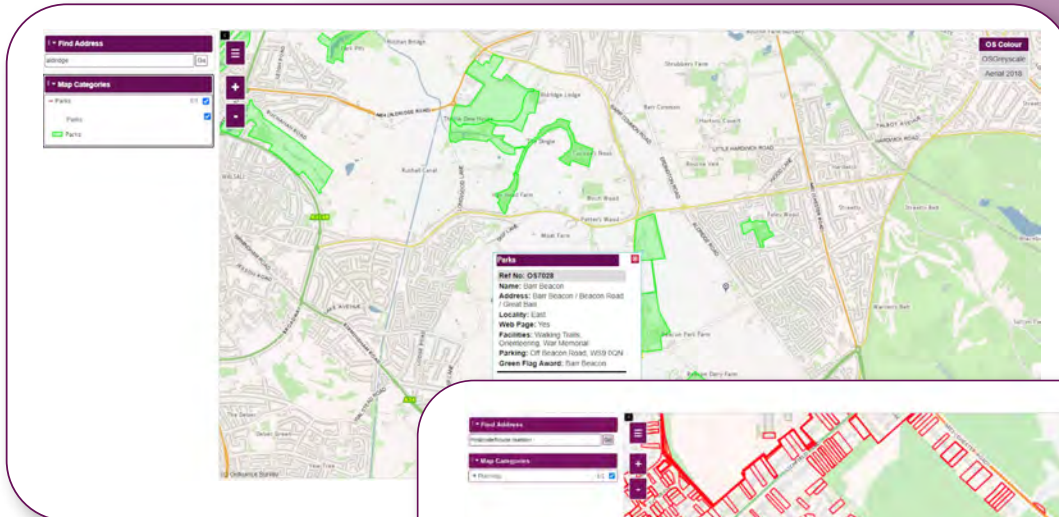
Embedded Maps

Walsall have made great strides by producing service focussed embedded maps within their website. This helps them to further respond to the need to enable members of the public to self serve and has also led to considerable time savings for their call centre.

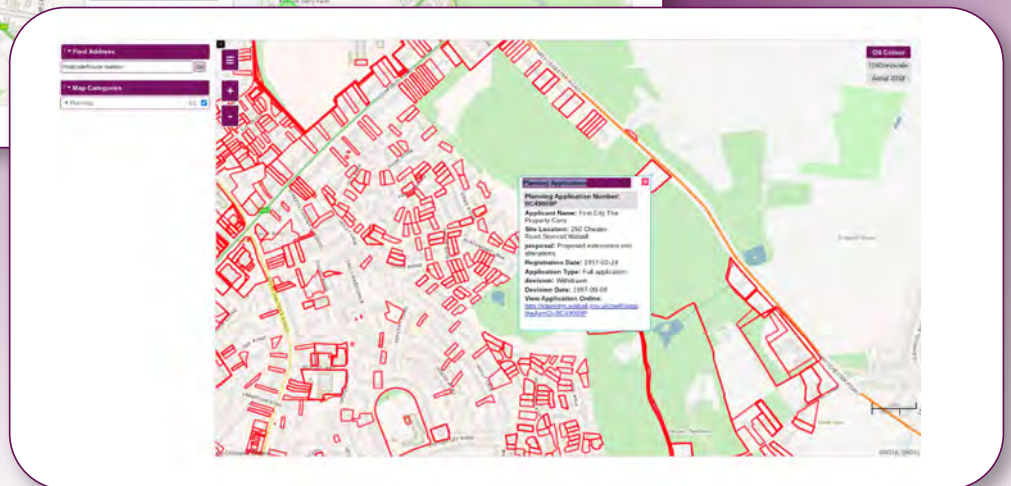
Examples, meeting recent needs, include maps providing information on location and opening times for public health sites including GP Surgeries, Emergency Dentists, Pharmacies and Supermarkets as well as a need to provide information on open public spaces for members of the public to take exercise during the Coronavirus Pandemic.



<https://mymaps.walsall.gov.uk/parkssolo.html?MapSource=mapsources/parkssolo&StartEasting=98194&StartNorthing=02316&StartZoom=1000>



Another example is a simple look up service for Planning Applications, with links to the actual planning application documentation.



<https://mymaps.walsall.gov.uk/planningappssolo.html>

The future for Walsall

Walsall are currently implementing a plug in for a live public view of gritting vehicle locations in iShare Maps and have plans to address Problem Reporting for Highways issues such as Potholes, Fly Tipping and Graffiti and also consultations for Planning and Environmental Issues in the near future. Astun have provided guidance on implementing the iShare Logger Tool and look forward to further investigating requirements over the coming months.

“WALSALL'S RICH HERITAGE
 Proud of our *PAST, PRESENT and FUTURE*
 Walsall has a rich history and is proud of its past; with a market dating back to 1220 and communities of Walsall dating back to the Domesday Book, it's known formerly as the 'town of a hundred trades', and notably is still renowned for its leather heritage and industry. The borough of Walsall is made up of distinct communities across 20 wards with a population of nearly 300,000 people, it is situated in the heart of the Black Country and West Midlands.

”





Products

Astun offer a range of products based on open source technology. Our products can be grouped into three categories – iShare, Data Discovery and Astun Data Services.



Services

Astun Professional Services help you make the most of the iShare products, integrating with your existing systems, enabling data sharing and providing Open Source Support and Training.



Use Cases

Our Cloud and On-Premise solutions both let you put experts in place - providing services that deliver outstanding results in every sector.

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