



QGIS in the Cloud

Service Definition v12.0

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Overview

QGIS in the Cloud provides users with web based access to a fully managed pre-configured Desktop GIS that includes Ordnance Survey background mapping, address searching, direct access to a corporate Spatial Data Warehouse, print templates, processing services and more as standard.

This allows your GI Managers and analysts to focus on delivering Geographic Intelligence to staff and stakeholders and frees organisations from the costs and complexity of the local management of their Desktop GIS.

For organisations already using QGIS, it provides access to the same Desktop GIS application currently in use, but avoids the issues and costs related to managing hardware and GIS configuration. For those currently using a proprietary Desktop GIS solution, QGIS in the Cloud provides you with a rapid deployment of a much more cost effective Enterprise grade Desktop GIS application.

Service Features and Benefits

Service Features

- Cloud hosted Enterprise Desktop GIS accessible anywhere via web browser
- Pre-configured for UK users with OS background mapping, gazetteers etc
- Direct access to Spatial Data Warehouse (PostGIS) included as standard
- QGIS functionality can be extended with user installed plugins
- Upgraded and maintained by Astun to latest Long Term Release
- Excellent performance - No high spec client machines needed
- Web browser access ideal for remote / flexible working
- Any client machine with HTML 5 web browser (e.g. Chromebook)
- Responsive IT Support Helpdesk (2nd line)
- Seamless integration with iShare and Enterprise Metadata services

Service Benefits

- Pre-configured for the UK Public Sector so users are immediately productive.
- Fully managed with no local infrastructure to maintain and support
- Access anytime from any device encouraging flexible working and productivity
- Excellent performance on low spec client machines. Avoid expensive upgrades
- Data is securely cloud hosted and backed up.
- Spatial Data Warehouse avoids data duplication and encourages data sharing
- No specialist configuration / training needed
- Automated user on-boarding from single sign on credentials
- Simple pricing model, with discounts for portable Microsoft licenses
- Lower cost of ownership compared to on premise desktop GIS

QGIS Desktop

For Desktop GIS users, Astun Technology provides support, training and customisation for QGIS, the widely used Open Source GIS. QGIS is unquestionably the best GIS tool in the free and open-source software (FOSS) community and a true rival to proprietary desktop GIS products.

For more information, please see:

<http://www.qgis.org/en/site/>

The latest QGIS documentation can be viewed and downloaded here:

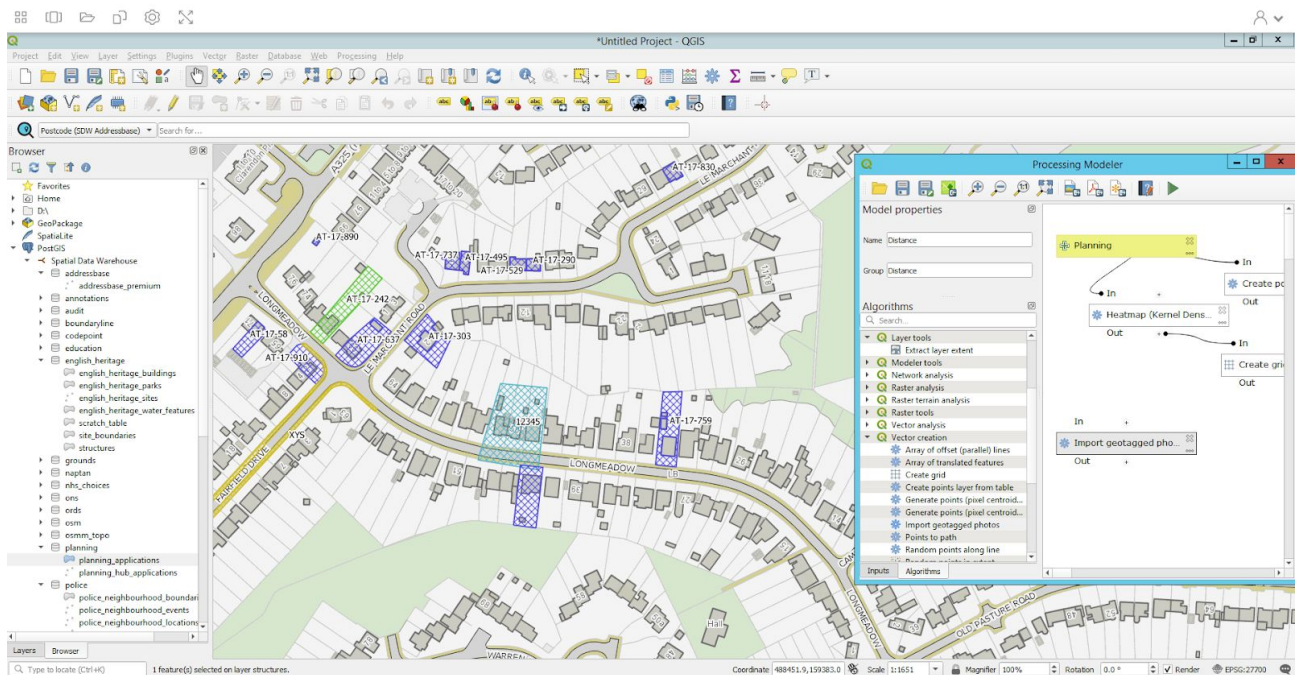
<http://www.qgis.org/en/docs/index.html>

QGIS is a powerful desktop GIS application that allows organisations to collect, share, analyse, and visualize enterprise level volumes of location-based data. Whilst QGIS can be installed and managed on local PCs, we believe that there are substantial benefits to be gained from adopting QGIS in the Cloud.

QGIS in the Cloud

QGIS in the Cloud offers a pre-configured, hosted and managed service with browser-based access to QGIS from any appropriate device or location.

For almost all organisations, the solution to their cost, productivity and performance issues can be addressed by QGIS in the Cloud.

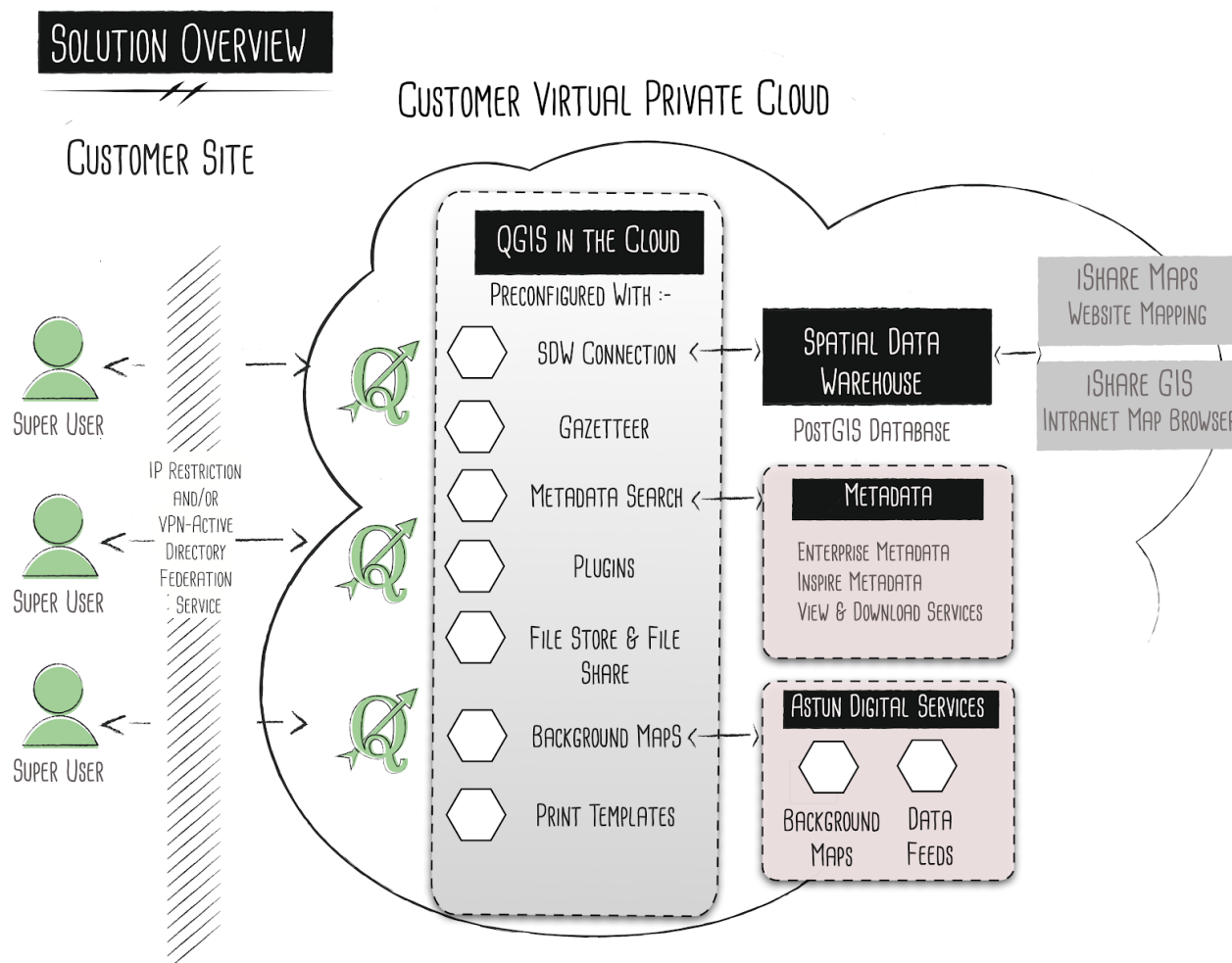


QGIS in the Cloud

QGIS in the Cloud Architecture

QGIS in the Cloud is hosted on **Amazon Web Services (AWS)**.

It is hosted in a virtual private cloud which can be accessed from the client's network via a VPN or using IP restriction.



Pre-Configured for Rapid Deployment

QGIS in the Cloud is pre-configured to meet the specific needs of the U.K. Public Sector, ensuring a rapid deployment and removing the need for your GIS Manager to undertake this work.

QGIS in the Cloud also integrates seamlessly with our **iShare in the Cloud** solutions (See separate G-Cloud Service Definition).

Key features are:

- **Access to Ordnance Survey PSMA Base Mapping and OS Zoomstack**

Astun Data Services (See separate G-Cloud Service Definition) provides a pre-configured Ordnance Survey PSMA base mapping service, for all QGIS in the Cloud users.

For iShare in the Cloud customers, QGIS in the Cloud will be using the same base mapping.

The default projection for all data is set to be EPSG:27700 (British National Grid).

- **Access to an Address Search using OS AddressBase**

QGIS in the Cloud customers have direct access to an Ordnance Survey AddressBase gazetteer via a search plugin, allowing them to centre the map window on the address selected.

- **Direct Access to a Spatial Data Warehouse**

QGIS in the Cloud is supplied together with a Spatial Data Warehouse, which helps to break down “data silos”, improve joint-working across the organisation and increase productivity.

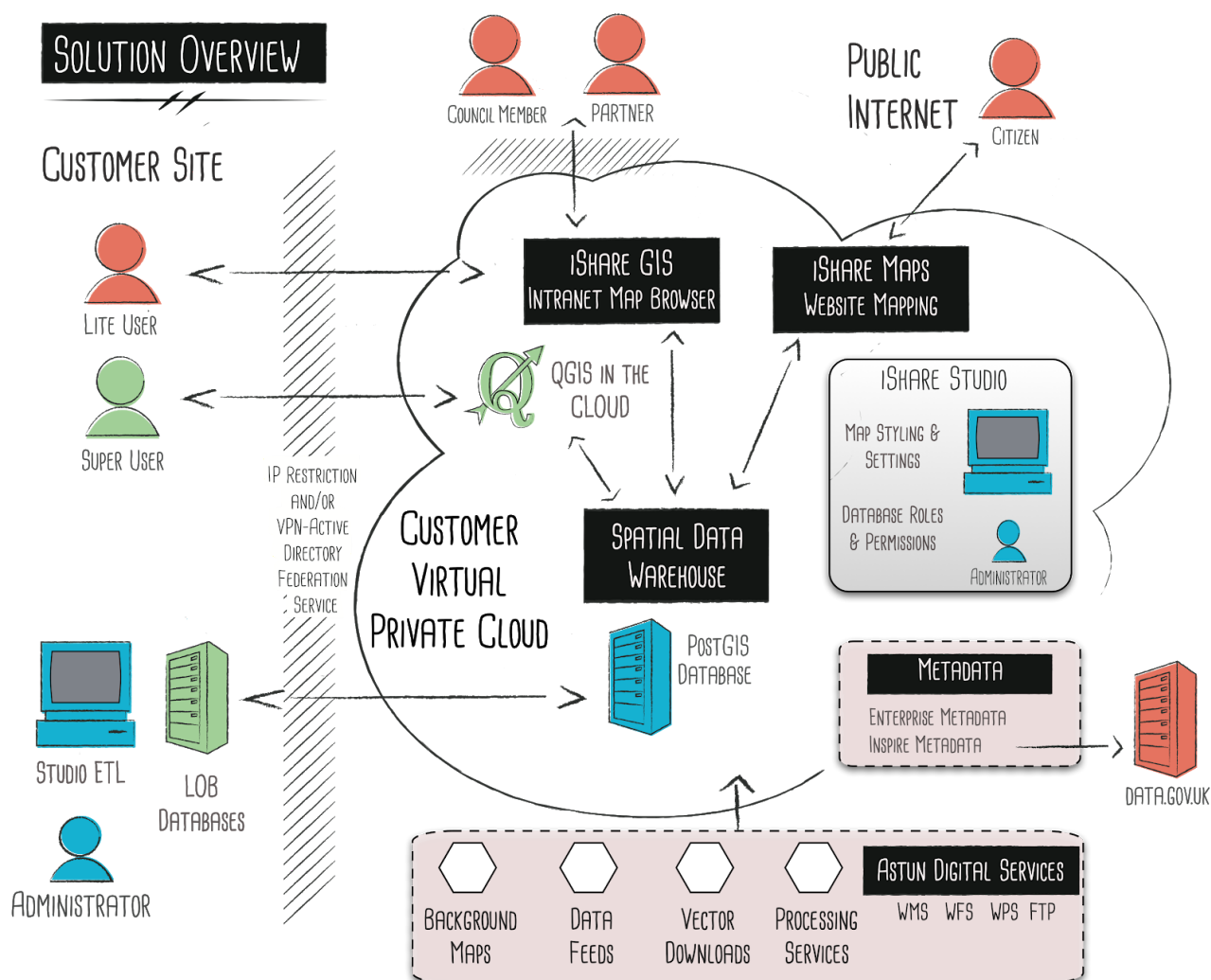
For **iShare in the Cloud** customers (See separate Service Definition), QGIS in the Cloud reads and writes to and from the same **iShare SDW** as their iShare solutions. With iShare SDW as the master data repository (i.e. the definitive version of all corporate spatial data is stored within the SDW) users are able to connect to the SDW as read only or read/write users via QGIS in the Cloud, other desktop clients and the iShare GIS intranet browser application subject to their role based permissions.

- **Access to Corporate Print Templates**

QGIS in the Cloud users have access to a set of pre-configured print templates.

- **Direct Access to your Enterprise Metadata Catalogue (GeoNetwork CSW)**

If you have implemented the Enterprise Metadata option within **iShare in the Cloud** (See separate Service Definition), the same **GeoNetwork** CSW can be accessed from within QGIS in the Cloud using the MetaSearch plugin to discover, view and load available datasets.



QGIS in the Cloud integration with iShare in the Cloud

Cost Savings and Freedom from IT Concerns

QGIS in the Cloud is a managed service hosted on AWS, providing the enterprise level security, stability, and reliability you would expect, together with improved processing speeds. This alone can lead to significant cost savings, as it immediately removes the need for organisations to purchase or maintain servers or upgrade desktop PCs.

In addition to providing organisations with the infrastructure to power QGIS in the Cloud, our Expert Team installs, maintains, and upgrades QGIS, including all the hardware, software, and the IT support required, dramatically reducing the input required from your GIS Team or IT Department.

Improved Performance

As a result of co-locating QGIS in the Cloud and the iShare SDW, users experience improved response times and overall performance, when compared with locally installed QGIS users reading and writing to and from an iShare SDW.

Also, by hosting on the world class infrastructure provided by AWS, we ensure that the solution meets your current and future needs as the server resources can be scaled up or scaled back according to need.

Flexible Working

QGIS in the Cloud helps organisations save money and increase productivity by providing a stable, secure, cloud-based infrastructure for GIS desktops that supports flexible working as staff are able to work anywhere with browser access.

Training

Astun Technology can provide on site consultancy/training and public training courses at locations around the U.K. at an additional cost to assist customers.

Three standard QGIS training courses are offered:

- QGIS Essentials (2 days)
- QGIS Advanced (1 day)
- QGIS Enterprise (1 day)

For more information, please see our **Geospatial Open Source Training & Mentoring Services** Service Definition.

Help

The QGIS Project website provides access to a number of resources:

For User Guides, please see: <http://www.qgis.org/en/docs/index.html>

For other Resources, please see: <http://www.qgis.org/en/site/forusers/support.html>

Pricing

See Pricing Schedule.

Ordering and invoicing process

On receipt of an initial enquiry and details of the number of users a fixed price offer for QGIS in the Cloud will be provided along with an estimate of any additional consultancy services required (see Astun's Geospatial Cloud Consultancy Services for detailed rates and conditions).

The customer should provide by email:

- A purchase order for a minimum of 12 months service
- Signed acceptance of our Conditions of Service

Astun will provide:

- An invoice for the first 12 months service fee
- Invoices for ongoing service fees (charged in advance)
- Invoices for any additional consultancy (charged Monthly in arrears for services delivered)

On-boarding and Off-boarding processes

On-boarding

On receipt of a purchase order Astun Technology will:

- Issue Project Initiation Documents and host kick off call / meeting
- Set up QGIS in the Cloud servers within customer Virtual Private Cloud
- Configure QGIS in the Cloud with access to ADS background mapping, gazetteer and iShare SDW
- Commence delivery of additional configuration and consultancy services

Off-boarding

On receipt of a written request to terminate the QGIS in the Cloud service and subject to there being no unpaid charges outstanding, Astun will

- Delete the hosted environment including all servers, datasets, user details and customer specific configuration stored within QGIS in the Cloud.
- Any further "Off-boarding" assistance is chargeable in accordance with Astun's

SFIA rate card.

Information assurance

Astun are Cyber Essentials Plus accredited. QGIS in the Cloud is hosted on Amazon Web Services (which is ISO 27001 accredited). It has an architecture that adopts AWS best practices for the AWS Shared Security Model and is subject to technical security baseline reviews by AWS. All customer servers are held within dedicated customer specific Virtual Private Clouds with all data being held securely in a Spatial Data Warehouse within each VPC. All data in transit between customer networks and the cloud is encrypted with network traffic restricted via IP whitelisting or site to site VPN.

Backup/restore and disaster recovery

QGIS in the Cloud is hosted within the Amazon Web Services (AWS). Client metadata and data are backed up on a nightly basis, the QGIS in the Cloud application software is backed up at each update cycle. Backups are replicated to a further instance located within a different geographic region for disaster recovery. Datasets and metadata are only replicated within the EU unless requested otherwise.

Backup and Retrieval process will be managed at both a Server and Database / Configuration level. Astun retain at least 5 daily backups of each and implement some automated tests to ensure their validity at least once a week.

Server backups (snapshots) will be backed up to a different geographical zone on Amazon Web Services. Astun run a series of scripts that will start the snapshot to ensure that it runs and perform tasks to ensure that the GIS services are available.

Database backups are FTP'd to a different server and then have an automated restore process run against them with validity checks on the resulting restored database.

Customers should ensure that their own backup procedures are applied in addition to those provided by Astun Technology as part of the QGIS in the Cloud service.

Service management details

QGIS in the Cloud is available 24 x 7

A QGIS in the Cloud Subscription includes Second Line Support provided to a nominated trained / experienced QGIS User based upon our fair use policy. We would expect this to equate to one 30 minute call-off support incident for each concurrent user per year.

Astun technology also offers Open Source Support Packages for those looking for additional assistance beyond the Second-Line Support provided as part of a QGIS in the Cloud Subscription. For more information, please see our **Geospatial Open Source Support Services**.

The support desk is available during normal business hours (Monday to Friday 9.00am to 5.00pm)

Service constraints

Most planned maintenance will be undertaken without interrupting service availability, however in the event that this is not possible downtime will be scheduled and customers notified in advance.

Service Levels

- QGIS in the Cloud is hosted on a high availability cloud infrastructure with a failover backup hosted in a different geographic region for maximum resilience
- Upgrades and patches are applied to ensure that QGIS in the Cloud is maintained at the latest Long-Term Release (LTR).
- Updates are applied as part of your subscription to QGIS in the Cloud.
- The services are continually monitored with automated messages sent to several staff in the event of deterioration or failure.
- QGIS in the Cloud service is set up with all users in a single shared user group. Other configuration options (e.g. specific user groups per departmental area) are available. Pricing for other configuration options depends on specific customer requirements.
- No financial recompense is offered for the unavailability of QGIS in the Cloud.

Data restoration / service migration

In the event that the customer terminates the service they can download their data from the service in a standard geographic file format (Geopackage, MapInfo tab or ESRI shp) or as a database export.

Customer responsibilities

- Customers accept the Terms & Conditions for Astun Digital Services by using the QGIS in the Cloud service
- Customers must ensure that their service access details are not disclosed outside of their organisation

- Customers are responsible for the ongoing administration of QGIS in the Cloud

Technical requirements

- Connectivity via VPN or IP Restriction
- ADFS (or similar) preferred
- Appropriate sub-domain and site certificates
- Remote access for support

Trial service

A free 30 day trial of QGIS in the Cloud is available on request, however the consultancy costs of implementation, configuration and administrator training (plus expenses) are chargeable.