GEOXPHERE

XMAP CLOUD GIS

FOR GOVERNMENT

SERVICE DEFINITION

CONTENTS

1. INTRODUCTION

1.1. OUR APPROACH

We believe geospatial data has a place in all aspects of UK Government, so we've designed services that break down as many barriers as possible to give GIS data and capabilities to your whole organisation, and where applicable, the public.

Our suite of XMAP services have been designed to be low-cost, practical and high performance.

When you subscribe to an XMAP service you're not just getting the service, you're getting our entire team. We maintain close relationships with our subscribers to make sure you have the best service possible and the best experience for your users.

1.2. WHY CHOOSE US?

- **Small, responsive team**. We care about how geospatial data can be used to solve everyday problems. It's not about GIS for the sake of GIS, it's about the answers.

- **We own and maintain our software**. We don't have to rely on a parent company for updates or improvements. If our subscribers need it, we can build it.

- **British built, owned and hosted**. When you subscribe to our services, you're supporting a UK Ltd SME.

- **Clear, competitive, no-nonsense pricing**. All our services have been priced to easily demonstrate a return on investment. We don't have hidden extras, lock away extra features or have different tiers for different levels of performance.

1.3. XMAP SUITE

The XMAP suite consists of the following services;

XMAP CLOUD GIS

A fully cloud-based intranet GIS that can be accessed from any internet-connected device. It includes tools to help users visualise, analyse and export spatial information.

XMAP PUBLIC MAP

A tool to publish interactive maps on your website, display as full-screen web GIS apps or integrate into back-office systems.

XMAP PUBLISHER

Creates WMS and WFS feeds for all layers within XMAP Cloud GIS to be shared with internal office systems or published as open data or INSPIRE feeds. Includes a QLR file creator to connect QGIS to the XMAP hosted database. Included as standard with an XMAP Cloud GIS subscription.

XMAP DATA FEEDS

OGC-compliant WMS/WMTS/WFS feeds streaming a range of data sources including Ordnance Survey premium and OpenData datasets.

XMAP 360

Display street-view style imagery. Compatible with any provider of mobile mapping survey data.

XMAP OBLIQUE

Display airborne oblique imagery. Compatible with any provider of oblique imagery.

Parish Online

A cloud GIS service designed for town, parish and community councils. It's easy-to-use, low cost, and connects to XMAP Cloud GIS for data sharing capabilities.

2. SERVICE OVERVIEW

2.1. OVERVIEW

XMAP Cloud GIS is a modern approach to sharing geospatial data and tools throughout the whole organisation in a cost-effective and structured way.

The software has self-service administration and is easy to configure and share with colleagues. Our existing customers love it and see the benefits over more traditional GIS vendors.

Geoxphere provides excellent one-to-one support. As a software-as-a-service provider, it's key that we maintain great relationships with our subscribers so we can help solve problems and improve the software.

XMAP Cloud GIS is updated on a weekly basis to provide incremental improvements. This is the most unobtrusive way to ensure essential government IT systems remain up-to-date and relevant.
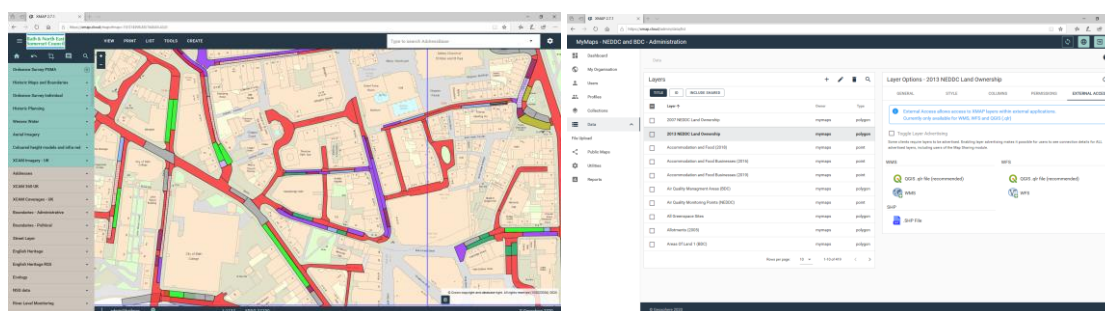

2.2. SERVICE BENEFITS

- **Cross-department working improved**. Local Authorities and Government Agencies that have deployed XMAP have seen the benefit of sharing data between departments. Being able to simply switch on a layer provided by another department instead of emailing and waiting for a response saves huge amounts of time.

- **Single source of truth**. XMAP makes it easy to manage and publish master copies of datasets throughout an organisation. Gone are the days of having multiple copies, leading to uncertainty and mistakes.

- **Aligns with remote working policies**. XMAP can be accessed via a login from any web browser. This allows staff to access definitive information from wherever they are. For remote-workers, it also reduces the strain on VPNs or thin-client connections.

- **Enables greater collaboration with other organisations**. We want to promote the sharing of consistent data across government. XMAP has configuration options so you can share datasets to your County, District or Local Councils, or even to neighbouring Councils.

- **Reliance and strain on local IT servers and processes reduced**. As XMAP is hosted on highly resilient UK-based servers, there's no need to procure and maintain local IT resources.

2.3. SERVICE FEATURES

- **Works on Desktop, Tablet and Mobile**. XMAP works through any modern web browser so users can access data and tools wherever they are.

- **Unlimited usage and user accounts**. We don't put any restrictions on the use of XMAP within an organisation.

- **Encrypted and secure**. All communications through XMAP are encrypted and our infrastructure and software holds up to rigorous penetration testing.

- **Cloud Database**. All data is hosted on a scalable and secure database, giving flexibility and compatibility with other services, such as OGC-compliant web feeds and integration with QGIS and ESRI products.

- **Single Sign-On Compatibility**. Cloud GIS can be deployed with in-built User Management or through utilising a Single Sign On (SSO) policy or manager.

- **Web accessibility**. We conduct regular accessibility reviews on our software to make it usable for anyone.

- **Rapid deployment**. XMAP can be deployed in a matter of minutes. We do all the hard work setting the account up, then we assist the chosen administrator(s) to add users and import data.

2.4. MAPPING FEATURES

- **Layer Control**. The Layer Control in the side-bar makes it quick and easy to find and enable different datasets. It has expandable collections so themes of layers can be easily grouped. It has built-in options such as; Zoom to Extent, Add Feature, Slide Transparency, and Filter.
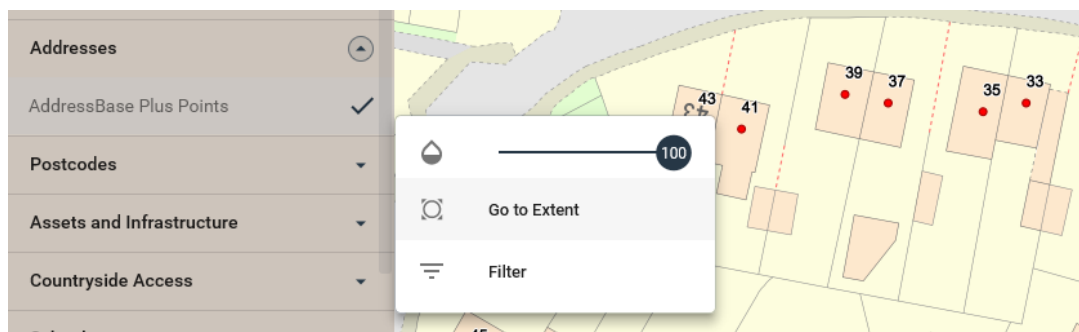

- **Quick Search**. The search bar gives users an OS AddressBase or LLPG quick search. Selecting an address zooms the user straight to that location.
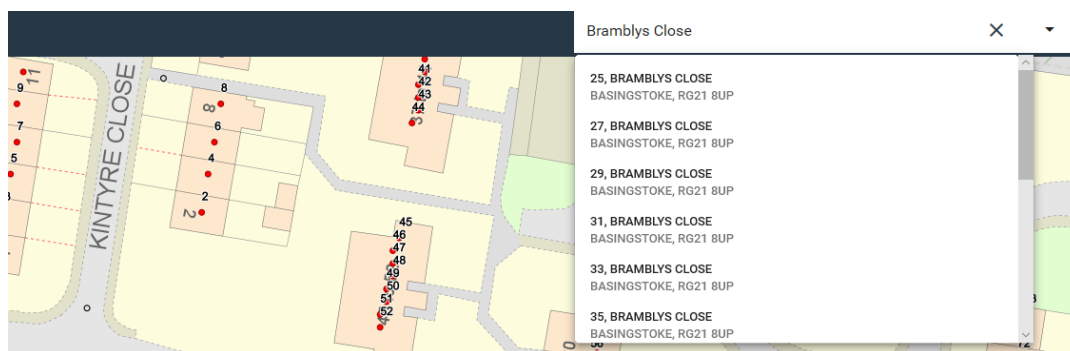
- **Advanced Address Search**. This full-screen view gives a deep-dive into either AddressBase or your LLPG. Users can search and filter by postcode, town, LPI or building type. Results can be shown on the map or exported to CSV.

- **List View Search**. This spreadsheet-style view of a map layer has filtering and sorting features to easily find content. Entries can be selected and found on the map or exported to CSV.

- **Constraints Checker**. A spatial search tool that interrogates a pre-set list of layers to return a report of map objects it found within a user-defined area. Can be configured to assist in Land Charges, TPO searches or a variety of other departmental uses where standardised searches are needed.

- **Data Extract**. A spatial search tool that finds all map objects found within a user-defined area. This works on a single layer at a time. It has filtering capabilities so only returns map objects of a particular type. Useful for extracting residential addresses, for example.

- **Map Mask**. Focus the map on the geographic extent that's important to your team. There are three style options including transparent white, transparent black and solid white.

XMAP SUITE
Digital Marketplace – Cloud Software

GEOXPHERE | GX
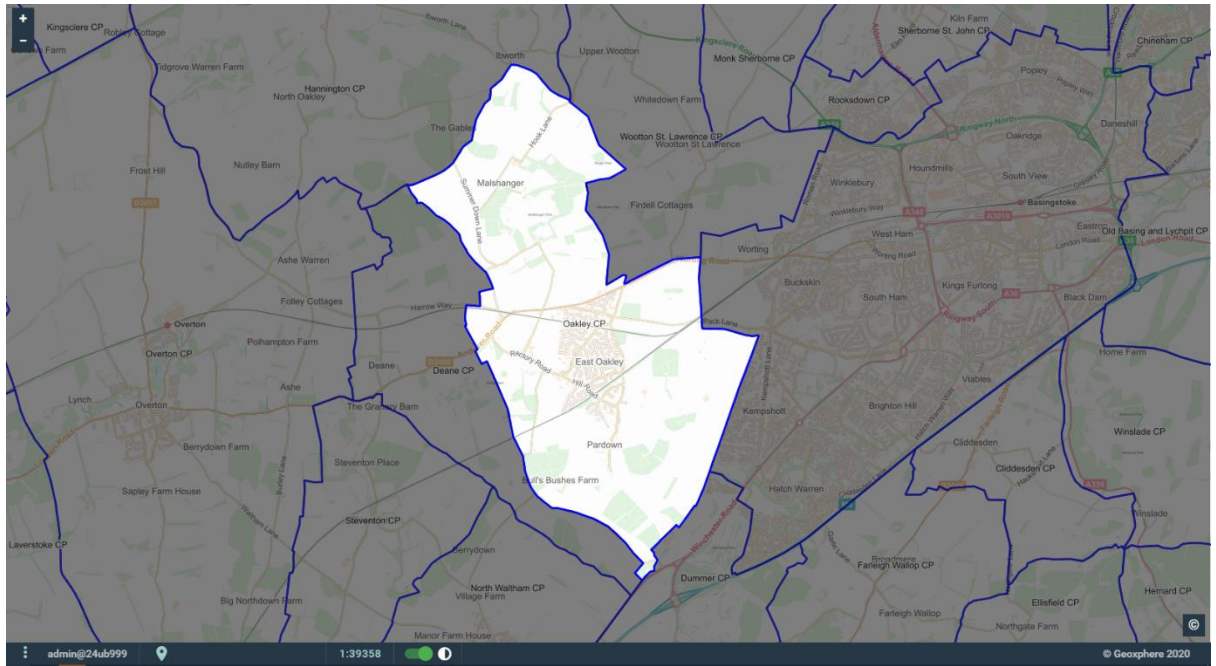
- **Print to PDF or PNG**. The Print tool allows users to create professional, branded, accurate documents ready for distribution or physical printing. It allows the user to set the location, scale, legend, paper size and layout.
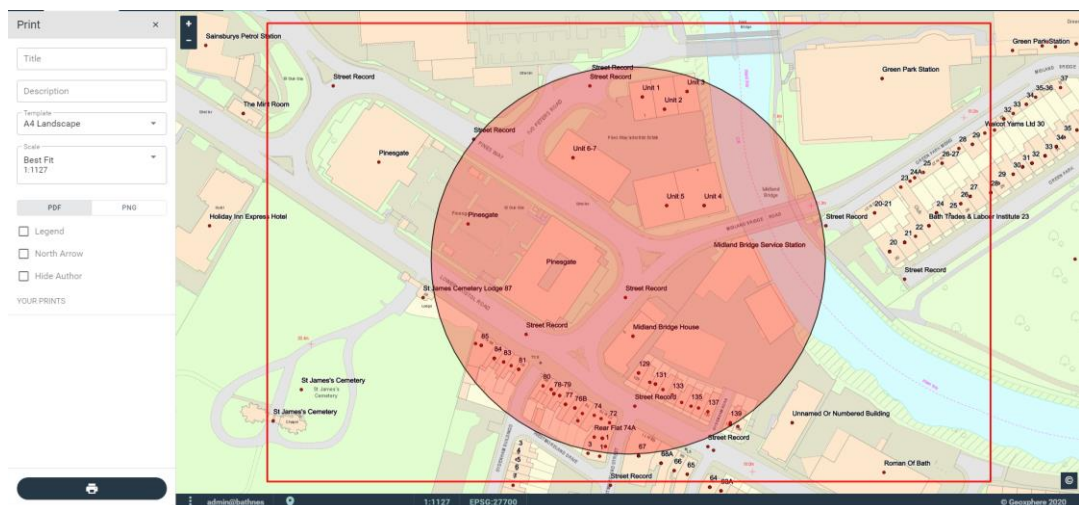
- **Bookmarks**. Used for recalling a specific location and set of enabled layers. This is useful for taking users back to specific project sites without having to re-enable layers manually.

- **Editing**. Editing of layers can be enabled for any layer in XMAP. This is controlled by the administration tools to ensure data integrity. Points, lines and polygons can be added, edited or deleted to conform to set attribution and styling criteria. Any edits have a data trail including user and time.

- **Attachments**. If permissions allow, documents can be uploaded and stored against a point, line or polygon feature.

- **Measure**. A free-hand distance and area measurement tool that displays the results in the user's unit preference.


- **Annotation**. A free-hand tool for marking-up the map ready for printing. The tool allows unstructured data to be added, but this is only visible to that user. Points, Lines, Areas, Circles and Text Labels can be overlaid on the map.

- **Coordinate Finder**. A lookup tool for navigating to specific coordinates in British National Grid or Latitude/Longitude.

2.5. ADMIN PANEL FEATURES

- **Data Sync – Scheduled**. XMAP Data Sync is a small executable program that, when run, takes the contents of a folder of shapefiles and ingests them into XMAP. This can be run on a nightly schedule and any duplicate layers found are overwritten on XMAP. This is a quick way to ingest data when starting to use XMAP, and a handy 'set-and-forget' tool for ongoing maintenance.
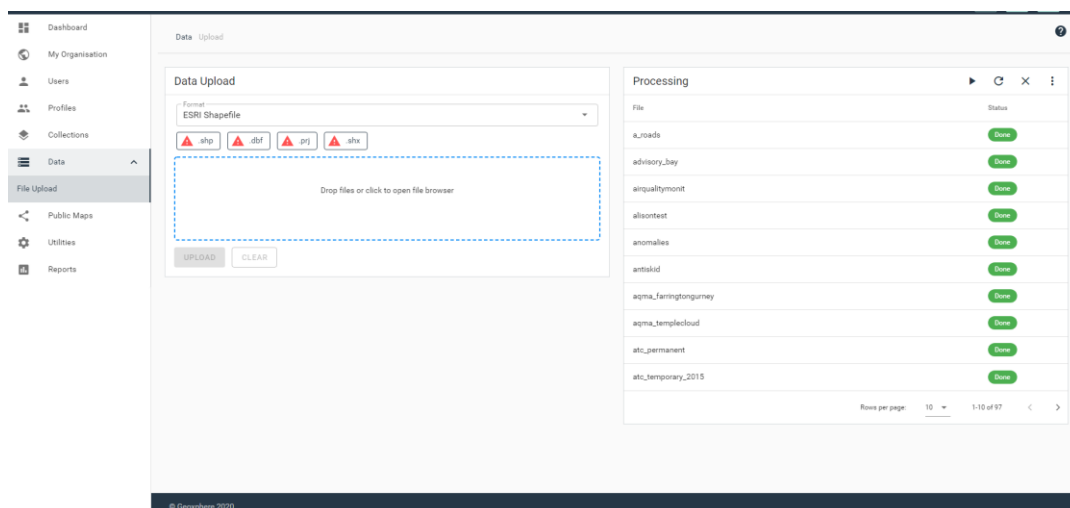
- **Data Sync – LLPG and IDOX**. Using the XMAP Data Sync tool, copies of LLPG can be uploaded into XMAP to be used as a search tool. The LLPG is automatically generated as a map layer as well. If a schedule is set to export IDOX data (or any similar application), this data can be loaded into XMAP.

- **Data Sync – Drag and Drop**. Shapefiles can be loaded through the Admin Panel at any time using the drag-and-drop interface. A report for all loaded, pending, completed and failed layers are shown so action can be taken, if necessary.

- **Branding Manager**. This allows you to configure the logos used on-screen and in the print templates. It also has a default language option and the ability to customise the setup and password reset emails for your users.

- **User Manager**. This allows you to create, edit and delete user accounts. It has batch options including changing profiles and sending password reset emails.
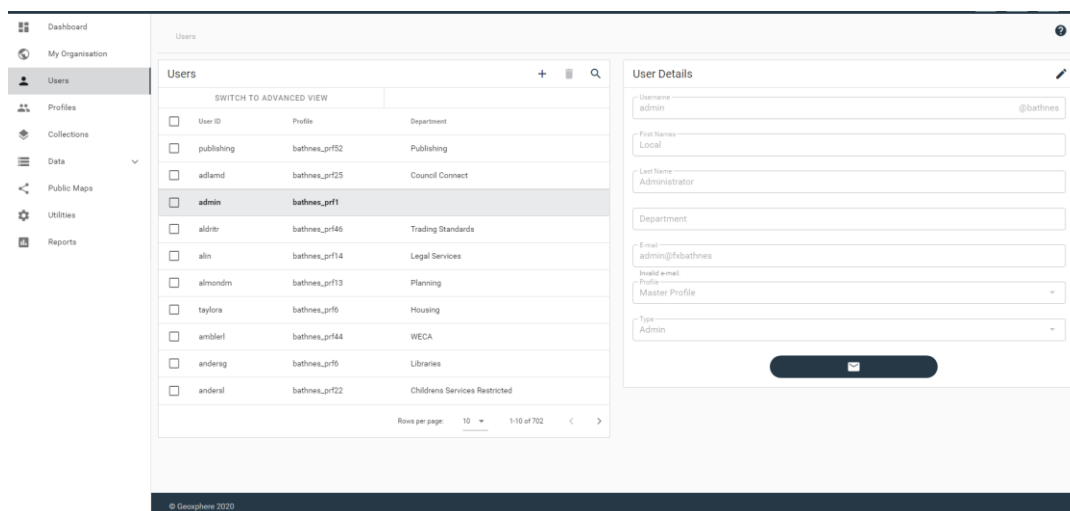
- **Profile Manager**. Profiles consist of collections of layers and sets of tools. A variety of profiles are usually configured to cater for the needs of different departments. Through Profiles you can restrict access to specific collections of layers.
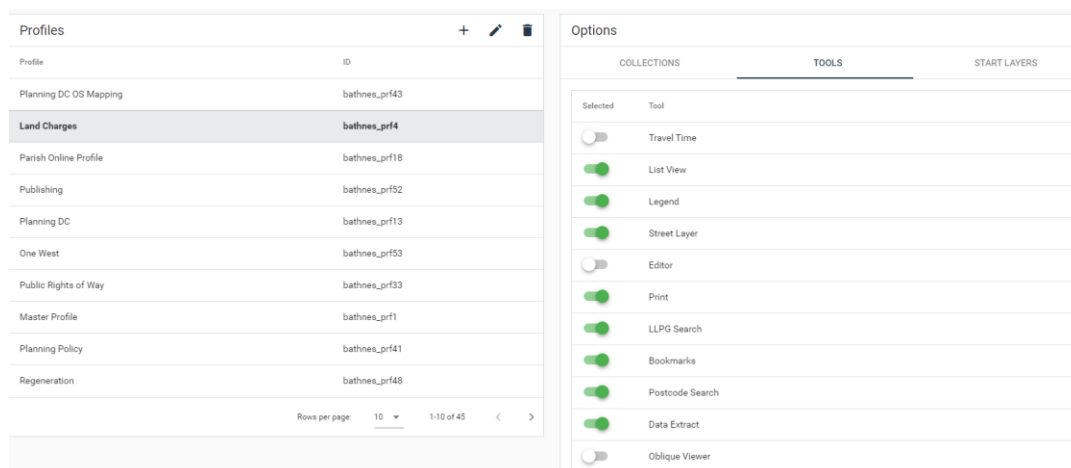
- **Collection Manager**. This allows you to group layers into collections (or sometimes called Folders) to organise layers into themes of information. This makes them easier to find in the Layer Control.

- **Data Layer Manager**. This allows you to control the name, description, copyright, styling, viewing permissions, editing permissions and publishing settings.

- **Data Layer Creator**. Create new Map Layers directly within XMAP or add external WMS feeds. Permissions to create layers can be given to other users as required.

- **Styling Manager**. Options for styling the layers with a range of symbology, fill styles and labelling. Layers can be styled with a single style or by classes, so features will change their colour depending on information stored within them. This allows dynamic and engaging maps to be produced. XMAP includes a vast array of symbols covering many themes, including environment, society, civil security and asset management.
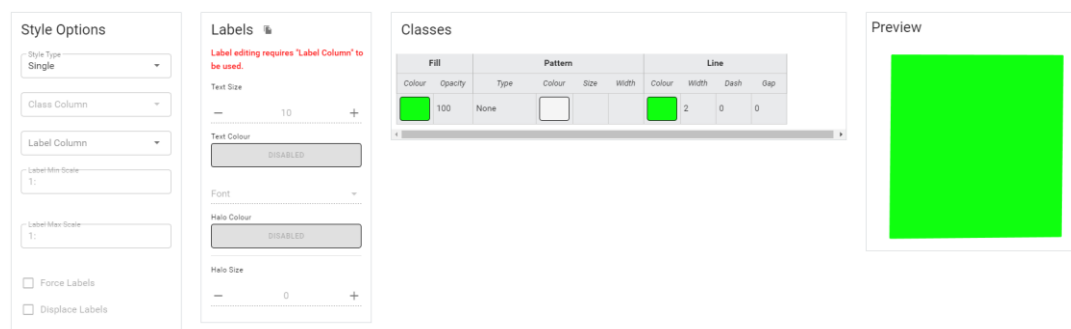

- **Copyright Manager**. Gives a list of available copyrights to apply to layers, and allows the creation of your own.

- **Reporting**. Displays user login times, browsers used, layers displayed and printouts produced. Can be set to specific time or user limits. This feature gives administrators insight into how XMAP is used across an organisation.

2.6. DATA FEATURES

- **Built-in Ordnance Survey PSGA and OpenData stack**. XMAP includes a fully-maintained Ordnance Survey stack with three style options; standard, greyscale (black & white) and white (for viewing on aerial photography). If you're only intending on using XMAP Cloud GIS and XMAP Public Map then you don't need to purchase additional web map services.
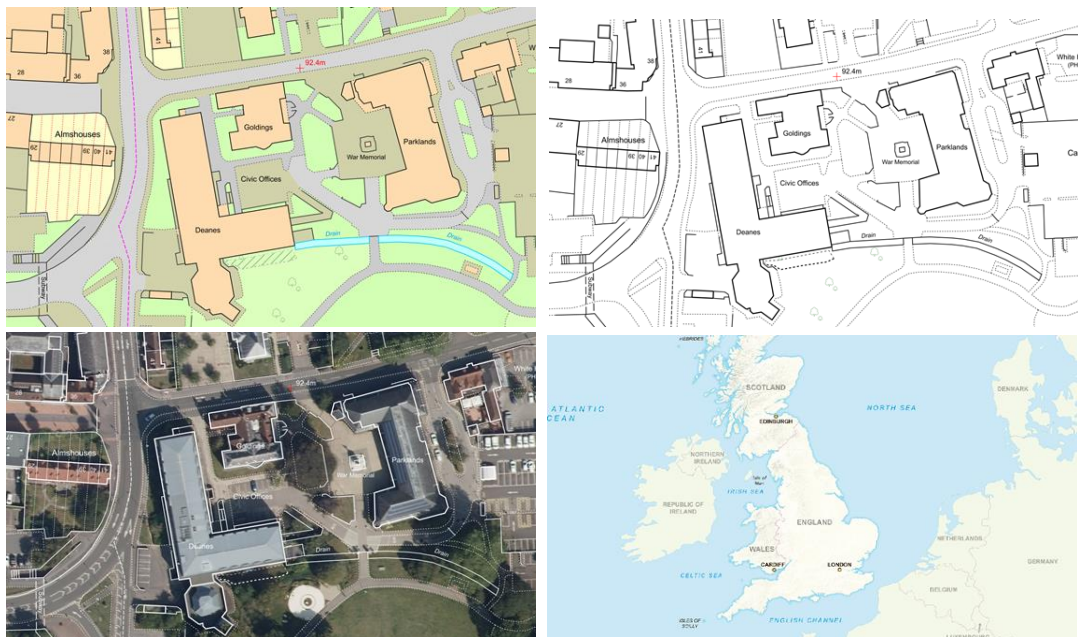

- **Over 250 3Rd Party managed layers**. We maintain over 250 data layers from a variety of government agencies and include them in your XMAP account. This means you get the benefit of having the data for the whole country, and you don't have to keep them updated yourself. Sources include:

  - Ordnance Survey
  - Environment Agency
  - HM Land Registry
  - Natural England
  - Department for Transport
  - Historic England
  - Natural Resources Wales
  - CADW
  - DEFRA
  - Coal Authority

- **Sharing to Town, Parish and Community Councils**. Take advantage of the power of cloud-based architecture to share live data to Local Councils with zero effort. XMAP can be configured so that certain collections can be shared live to Parish Online. This means all town, parish and community councils in your area get the benefit of seeing your data in a controlled way.

2.7. EXTERNAL PUBLISHING FEATURES

- **QGIS Connector**. Each Map Layer hosted in XMAP has a QGIS qlr file generated for it. These can be simply downloaded and dragged into a QGIS project. This means users can view and edit data from QGIS and for the results to be saved directly in XMAP. Security is maintained as QGIS needs to have XMAP authentication added to it.
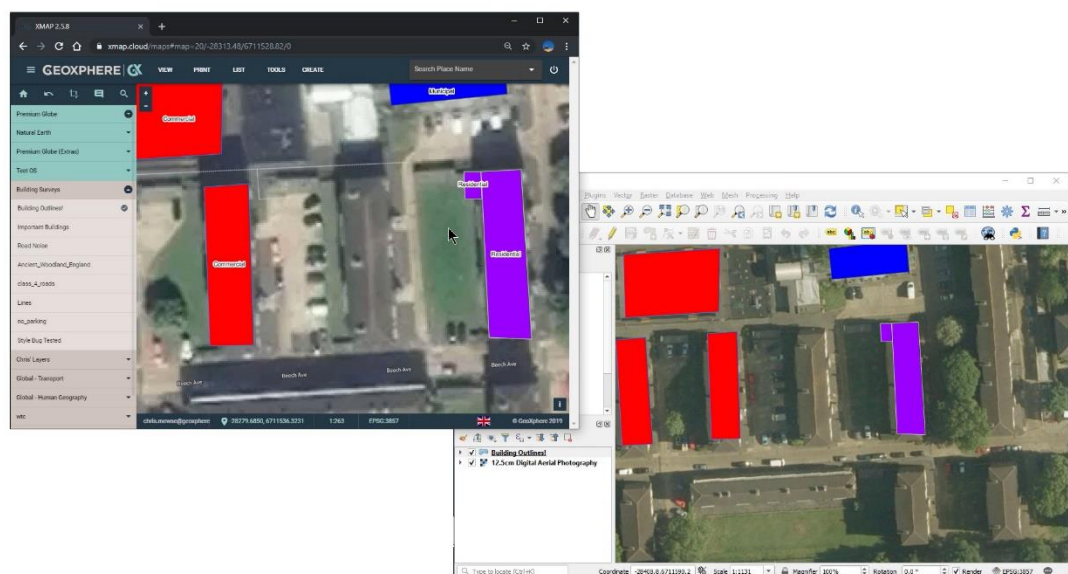
- **Layer Publisher**. Each Map Layer hosted in XMAP automatically has WMS and WFS generated for it. These can be used to share data with other systems, neighbouring councils, or published to the web as open data. There's also a Shapefile export.

2.8. COMPATIBLE MODULES (NOT INCLUDED)

- **XMAP Publisher**. Publish WMS and WFS feeds to data.gov.uk, as opendata, or connect to QGIS.

- **XMAP Public Map**. Publish interactive maps on your website or in back-office systems.

- **XMAP 360**. Display street-view style imagery. Compatible with any provider of mobile mapping survey data.

- **XMAP Obliquo**. Display airborne oblique imagery. Compatible with any provider of oblique imagery.

2.9. OTHER SERVICES TO CONSIDER (NOT INCLUDED)

- **XMAP Data Feeds**. Ordnance Survey PSGA and OpenData stack presented as WMS, WMTS and WFS to use in any OGC-compliant software. This is not needed as an add-on if using XMAP Cloud GIS or Public Map services.

- **Parish Online**. Procure a group subscription to give all town, parish and community councils in your area access to their own cloud GIS system. It's easy to use and can be populated with data shared from your XMAP account. Promotes cross-organisation collaboration and local government efficiency.

3. DATA MANAGEMENT

3.1. BACKUP & RECOVERY

SUPPLIER-SIDE
Geoxphere operates a backup and recovery system that sees our software and databases retained for up to 1 year.

CUSTOMER SIDE
In the event of any customer loss of data where the XMAP system has a copy or backup, we will provide a re-supply of the latest copy available.

3.2. DATA SECURITY

XMAP is hosted on high security cloud servers. Only key senior personnel have access to the hosting environment. The XMAP suite has been penetration tested by qualified external bodies at the request of customers.

4. JOINING AND LEAVING THE SERVICE

4.1. SIGN UP

Once a request is made to join the XMAP service, a member of the Geoxphere team will be in contact to discuss the contractual and technical aspects of the sign up process.

A start date will be chosen for the on-boarding process. This is usually made as part of a face-to-face meeting but can be implemented within a day if necessary.

4.2. TECHNICAL DEPENDENCIES

To be able to use XMAP, the customer must have one of the following Web Browsers and a high speed Internet connection;

- Microsoft Edge (or above)
- Firefox Stable Channel
- Chrome Stable Channel
- Safari Stable Channel.

It is recommended that the customer have a broadband connection with a minimum of 2MB download and 1MB upload speed.

4.3. ON-BOARDING

A new customer account is created immediately, and a plan is laid out for the initial deployment and the company-wide roll-out.

The deployment process includes:

- Branding of the account
- Establishing base layers and public sector data feeds
- Consultation on structure of user accounts and profiles
- Batch creation of user accounts and profiles
- Training of administrator on Admin Dashboard
- Training session for department representatives

4.4. OFF-BOARDING

Any map data created or edited with XMAP will be supplied back to the customer in the event of ending their subscription to the service. The data will be made available in common, open file formats unless otherwise specified by the customer.

4.5. END OF CONTRACT

At the end of the contract the customer will have no further access to the service and all logins, public feeds and public-facing maps will be terminated.

5. AVAILABILITY

5.1. PERFORMANCE

XMAP services are hosted on virtualised cloud servers. They provide both a highly available and scalable hosted solution with no single point of failure. Geoxphere offers 99.9% SLA on its services and has a 99.999% SLA for its ISP backbone infrastructure.

Geoxphere cannot provide a minimum download time for each map refresh due to the variations in customer's Internet connections. However, test show that under normal conditions on a Broadband connection map refreshes take less than 2 seconds.

5.2. AVAILABILITY

XMAP is available to use 24 hours a day, 7 days a week with a 99.9% minimum uptime.

5.3. PLANNED MAINTENANCE

All maintenance and updates to the hardware and software will, where possible, be carried out outside of normal working hours to mitigate the risk of any disruption.

Planned downtime events will be communicated to the customers with good notice.

6. SUPPORT

6.1. SUPPORT HOURS

Remote support by email will be provided between 0900 and 1730 Monday to Friday, excluding Public Holidays. The customer will also have a dedicated point of contact for specific contract or product queries.

6.2. SUPPORT TICKETS

Geoxphere assigns a Point of Contact to the customer. This ensures customer issues are dealt with in a personal and considered way.

Geoxphere provides fast, unlimited off-site support through our ticketing system.

6.3. GENERAL SUPPORT

Geoxphere engages with our subscribers to ensure they get the best possible service. We conduct regular reviews and vary meeting schedules and calls as per the client's requirements.

7. REFERENCES

Embarrassingly complimentary references available on request.

8. DEMONSTRATIONS

To request a demonstration email support@geoxphere.com. We'll set up a fully-featured account and give support to help establish workflows and dataset management as required.