Alchera Data Hub Service Description

January 2026

Contact: sales@alcheratechnologies.com

COMPANY

Alchera Technologies: data-driven mobility experts.

Alchera is a specialist in enterprise-grade mobility and infrastructure systems, providing software tools and machine learning to power data-driven infrastructure.

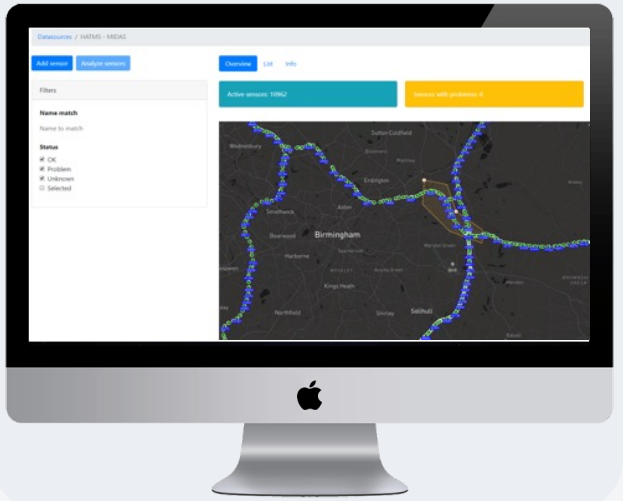
Alchera specialises in helping operators of road networks to maximise operational and commercial value of fragmented mobility data.

Our flagship platform, analyses & fuses data in real-time from existing sensors across the road network - including cameras, connected vehicles, GPS and IoT sensors - providing auditable access to relevant stakeholder groups both internally and externally where data can be shared for wider impact.

250+
YEARS OF INDUSTRY EXPERIENCE

20+
PEER-REVIEWED PAPERS

TEAM EXPERTISE



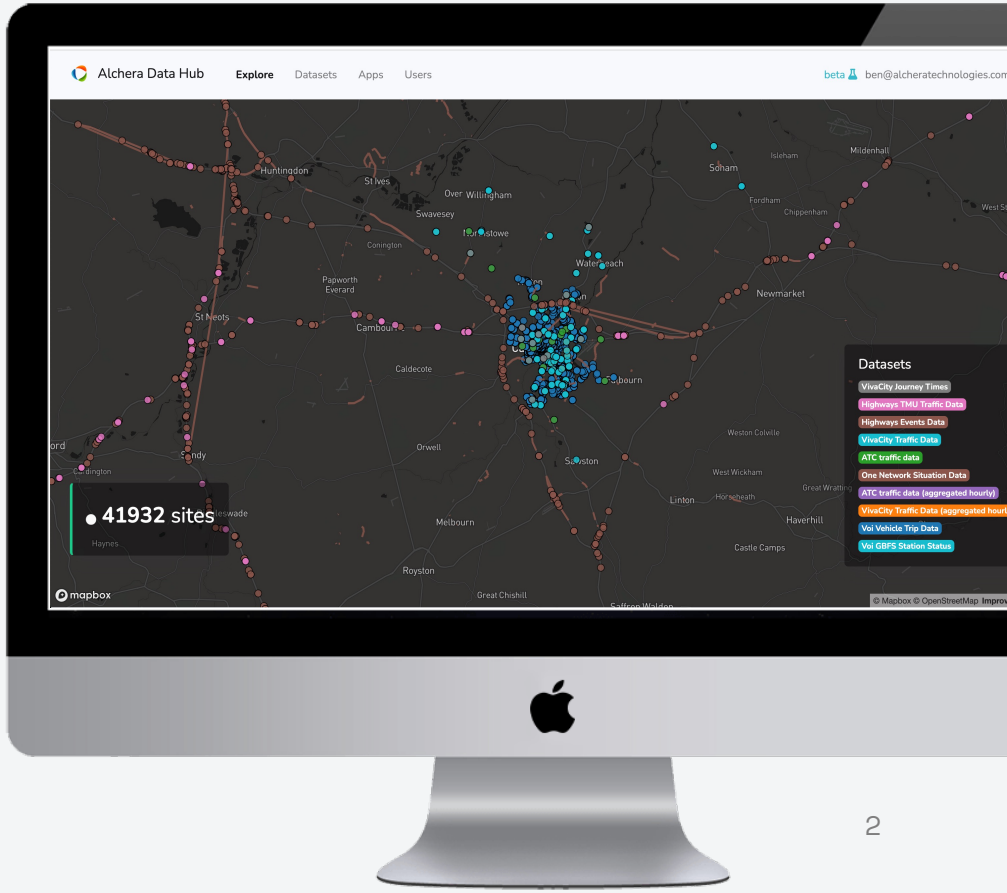
Motivation: increasing the value of existing data

Organisations (such as Local Authorities) spend £100,000s a year on mobility data for use by specific individuals. One data source will be used by a traffic control room, while another data source is being used by data analysts.

A problem exists when a new team has a mobility question (such as “is our Active Travel strategy working?”), as those teams often don’t know whether data exists to help them, then they struggle to access it, then when they have it, they struggle to use it effectively.

There’s an opportunity to increase the value of **existing** data. Firstly, by making it more efficient for teams to use data. Most valuably, by them generating mobility insight they couldn’t create before, so they can answer the big mobility questions themselves – backed up by data.

Alchera’s Data Hub makes this possible. All accessible through an easy to navigate web-based user interface, compatible with all major operating systems.



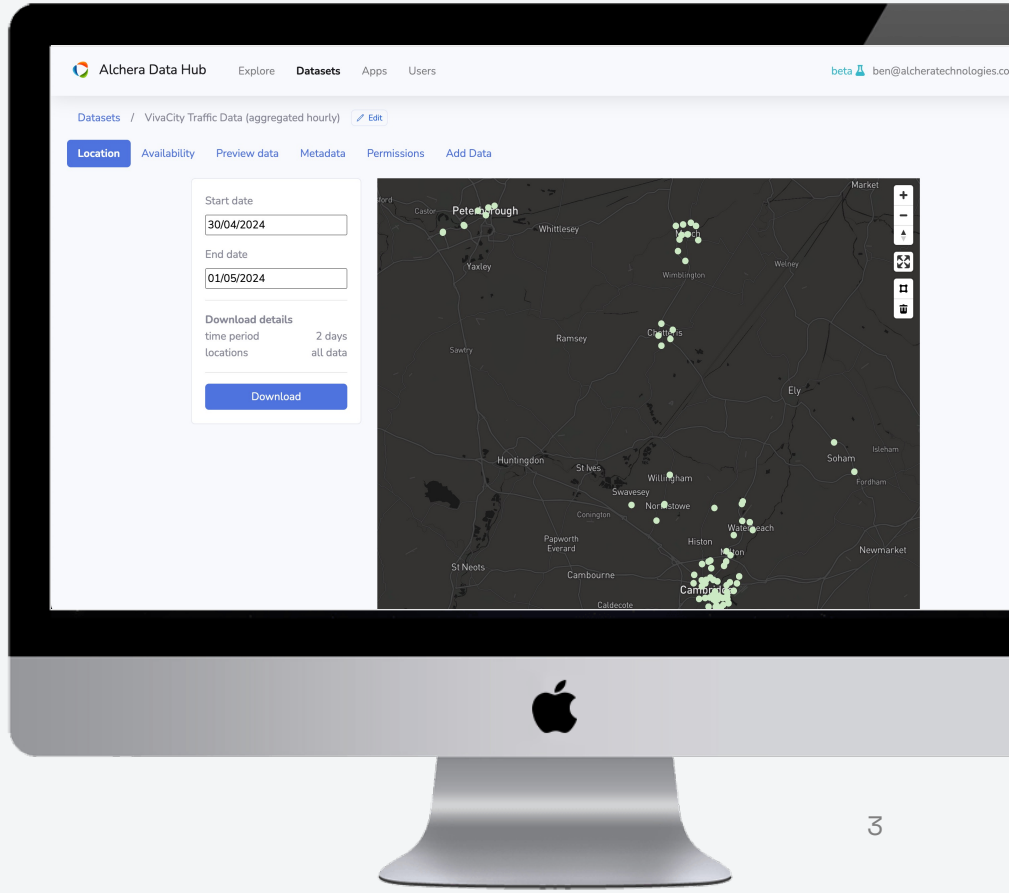
SOLUTION

Alchera Data Hub: Streamlining mobility data

Organisations use a range of tools in their mobility ecosystem to keep networks running smoothly. These tools include UTMC Traffic Management systems, multiple Transport Models, Real-time Passenger Information systems and others. In addition, new innovators and researchers are building new tools to solve issues using mobility data. Each of these ecosystem tools has their own links to data sources.

A problem exists as when upstream data sources change (for example, a contract is re-tendered), every downstream ecosystem tool must reintegrate with a new data supplier.

There's an opportunity to increase the efficiency of operations, with a platform which manages all data streams, ensuring continuity of ecosystem tools for a lower cost.

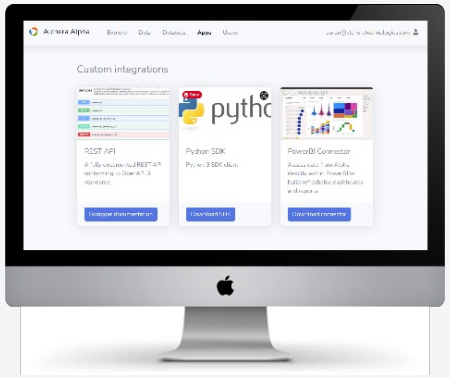


Alchera Data Hub: Features

Code & No Code Data Interfaces

Unlocking real-time data for all users via their existing tools.

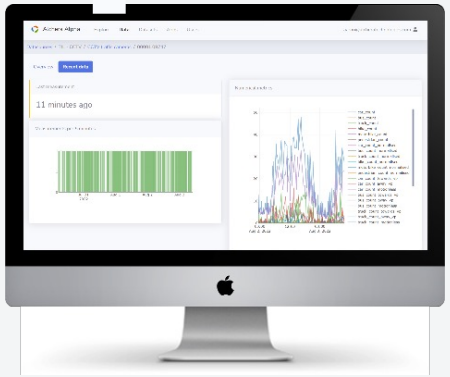
All users – from data analysts to decision makers – can find data within 5 minutes and access data within 10 minutes. Teams find data via a Map-based Data Catalogue and Access data into their existing tools via code interfaces (Python, API) and no-code interfaces (PowerBI, Excel). This can cover any mobility an organisation currently has – and any it will acquire in the future.



Data Quality Monitoring

Speeding up the journey from Data to Insight.

Automatic data pipelines take care of day-to-day data quality and monitoring work. Currently teams spend months cleaning data, aligning data to road networks and checking whether data is missing before they can use it. This feature allows teams to focus on generating the insight which power great mobility decisions.



Ecosystem Integrations

Deploying a reliable backbone for a data-driven ecosystem.

Managing the complex data integrations between different tools has been reliably demonstrated across multiple organisations. The Data Hub handles all the typical challenges, such as:

- What tools to access recent data.
- How transport models share back their enriched data.
- Who accesses what data.

New innovations easily slot into the existing ecosystem.

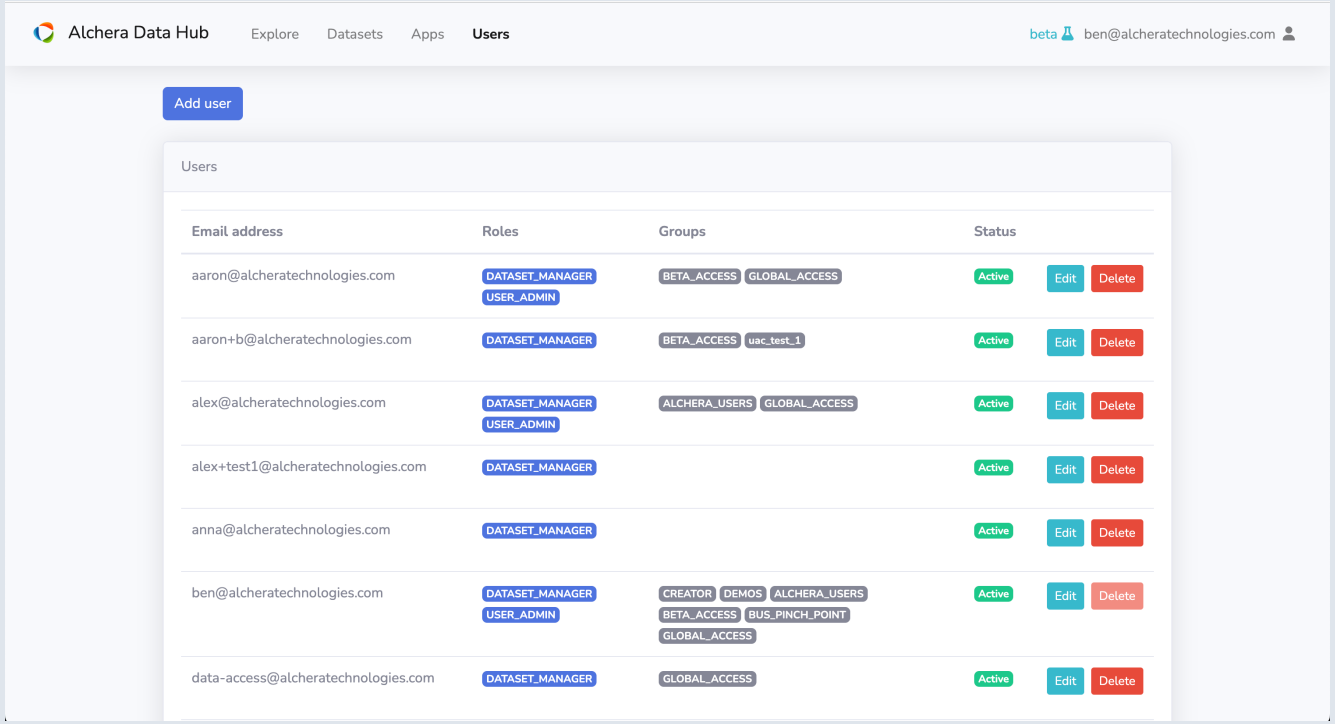


SUPPORT

Alchera Data Hub: User & Support Features

Included within the license fee:

- Unlimited data use and users, subject to our ‘collaborative use’ policy
- Web based user interface, including user access management
- All cloud infrastructure and compute costs
- Alchera support - available office hours, Monday to Friday (excluding public holidays). Examples, but not limited to:
  - Adding users and onboarding
  - Establishing new data connectors and assistance with onboarding new data suppliers
  - General troubleshooting and advice, specific to the general operation of the Data Hub
  - Ongoing maintenance of the Data Hub platform



Alchera Data Hub: Data Sources

Alchera has an extensive library of data connectors pre-built and additionally, will build any new connectors FOC. Additional data sources can be added at any time, without charge.

Ingesting data includes the following capabilities as standard:

- Fully managed data pipelines
- The ability for data providers to push data to the Data Hub in real-time
- The ability for Alchera to pull data from providers on any agreed schedule
- Transformation and normalisation of data as it comes into the Data Hub
- Full pipeline monitoring to identify upstream outages – notification to both the client and the data provider of any data gaps
- Catch up mechanism for upstream outages, enabling data to be backfilled and maintain data integrity (where available from the data provider)

While not exhaustive, the diagram is a sample of some of the most widely used data sources.



Alchera Data Hub: Data Outputs

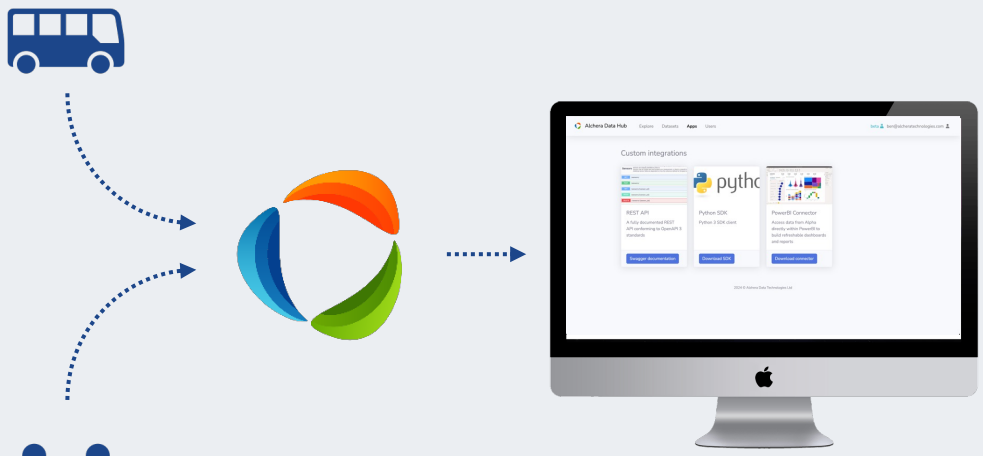
Alchera BI
- Our own dashboarding tool allowing for key metrics to be reported on within the platform, without the need for further integrations.

CSV Download
- Visual map and date selection enabling users to download desired data into a csv from the platform.

API Access
- The Data Hub provides API access as standard, enabling developers to integrate into in-house applications and workflows.

Python SDK
- The platform provides a Python SDK for developers to integrate and work with Data Hub sourced data in projects and workflows.

BI & GIS Solutions
- Most mainstream Business Intelligence tools, enabling users to connect and visualise data from the Data Hub, including PowerBI and Tableau.



Alchera Data Hub:
No limits data discovery

Alchera actively encourages customers to get the most out of the platform. What does this mean in practice?

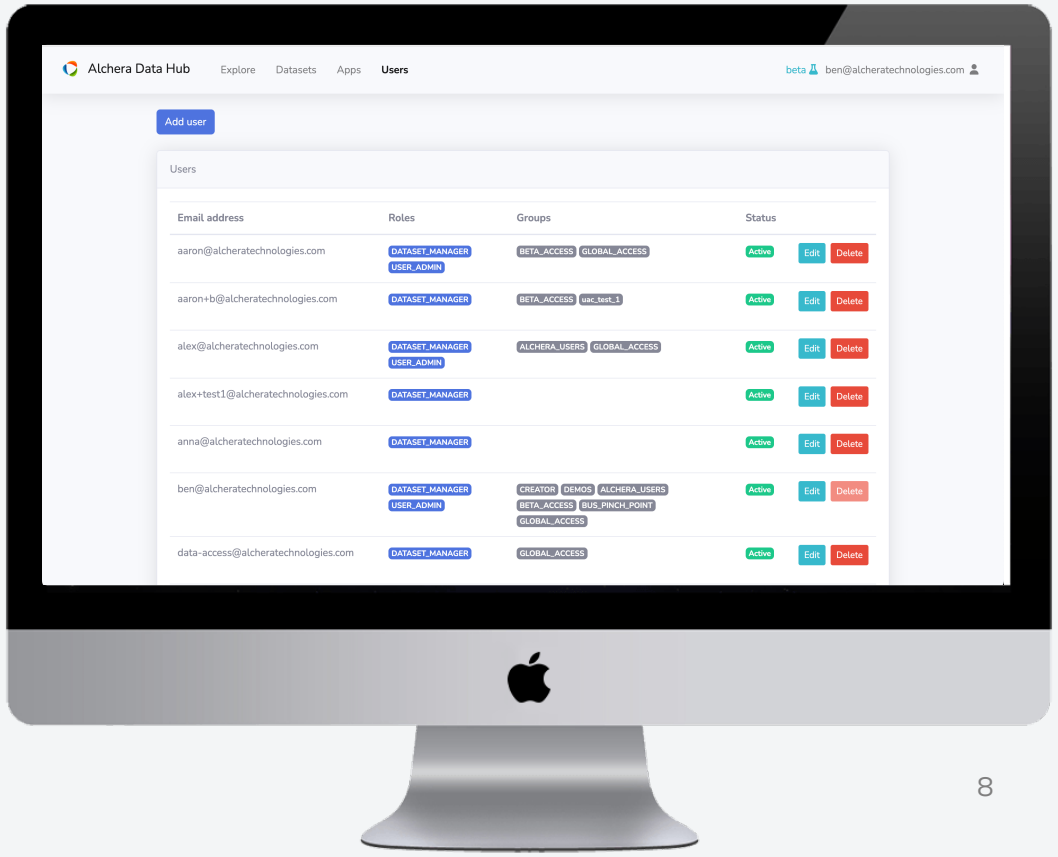
1. **No limits, or additional fees for users.** Provide logins to anyone who would get value from the Data Hub without worry about extra charges.

2. **No additional fees for usage or storage.** Use the Data Hub when you need it and store all the historic data you want.

3. **Third-party users?** Feel free to give access to third parties that need your data, such as external consultants.

User Access Management

- Granular level user access management, allowing:
  - Control over what data each user gets to see
  - Addition and removal of users on demand



Alchera Data Hub:
Platform & Cyber Security

Data Hub Updates & Enhancements

Alchera will continue to release timely and free of charge updates to the Data Hub platform, for the software to remain compliant with current regulations and to ensure its proper operation.

Further bespoke development work requested by the client will be strictly by negotiation. Costs and timescales for delivery by mutual consent.

Cyber Security

Alchera is Cyber Essentials Plus certified, which is a UK Government approved equivalent of ISO27001: https://iasme.co.uk/iasme-cyber-assurance/