

G-Cloud Service Definition

What is Cantabular?

OVERVIEW

Cantabular is a platform for the protection and publication of data. It helps organisations power reproducible statistical pipelines and interactive dissemination systems.

Cantabular produces data tables from large, confidential databases—or from its in-built table store—in real-time, in response to user queries. It combines data and metadata into a single API making it easy to use it to support analysis, the creation of bespoke outputs and interactive digital products.

Confidentiality protections, such as data perturbation and customisable disclosure checks, are also applied in real-time.

The Cantabular cloud service has been used by the Office for National Statistics (ONS) and the Northern Ireland Statistics and Research Agency (NISRA) to implement statistical disclosure controls (SDC) and confidentiality checks for the 2021 England and Wales Census and the Northern Ireland 2021 Census. Both systems are live and operational.

The UK Statistics Regulator says

“The Flexible Table Builder has proven to be a successful innovation which has helped expand the public ownership and use of the census results. We regard this tool as an example of good practice that other statistics producers should seek to emulate”

BENEFITS

- Publish vastly more data from confidential microdata datasets
- Publish new data releases sooner
- Allow internal teams and external users to design and generate their own outputs
- Automate and speed up time-consuming and manual processes
- Reliable, reproducible outputs

- Fully auditable software and data outputs

KEY FEATURES

- **Fast cross-tabulation:** create cross tabulations from large databases with perturbation applied in less than a second.
- **Flexible metadata service:** supplement data with reference and technical metadata, within a customisable metadata schema.
- **Automated disclosure checks:** use our disclosure rules language to create automated disclosure checks that fit the structure and content of your data.
- **Easy to use user interface:** our simple user interface helps your users build and customise tables from scratch.
- **Support multiple languages:** our metadata service can be used to provide translations of reference metadata so data outputs can be produced in multiple languages. Our user interface can also be localised to different languages.

DEPLOYMENT

Cantabular is provided as a private cloud application that can be deployed, managed and scaled in a client's own cloud environment.

Information assurance

- Data and deployment under control of customer so software can be used within clients own existing IA processes
- Software developed in accordance with 12-factor app methodology
- Read-only internal API with small footprint - 3 endpoints to minimise surface area and control inputs
- Minimal dependencies, self-contained binaries
- Software automatically tested at multiple levels during development; code quality, unit, integration and e2e tests must pass before new code can be merged in
- Automatic tests include multiple queries to ensure numbers being produced by algorithms match expected outputs

Data backup and restoration

Our private cloud deployment model means that data backup and restoration is fully under a customer's control. In the event of a disaster, software releases and licence files are accessible to customers via a secure software release site.

Service migration and off-boarding

The nature of the service is such that the data is always under the full control of the user. The data loading process is fully described in our software documentation and within the control of the customer.

Source files used to manage and configure datasets loaded into the software are available for download through our administration interface for convenience.

Cantabular is a read-only data processing, automation and publishing system, so no additional service data is generated within its operation, other than logs, which are made available to the host infrastructure to be consumed by a customer's own logging software.

Ordering and on-boarding

Cantabular can be ordered via the Cantabular Ltd sales team hello@cantabular.com.

The software is provided with the documentation sufficient to use it fully without further onboarding services.

However, depending on the nature of the customer's intended use of the software, there may be a need for further customisation of the software or integration with other systems. These requirements and services can be agreed on a case by case basis.

Termination

Your use of Cantabular can commence on the agreed commencement date and for the contracted term, but shall be subject to early termination as described within the termination section of our standard G-Cloud terms and conditions document.

If our agreement terminates, for whatever reason, you will delete any copies of the

software in your possession or control and any licence to use the software granted under our agreement will cease.

Pricing

The minimum pricing for the platform is £100,000.

Service constraints

New releases including security updates are provided by Cantabular Ltd via a secure software release website. It is the customer's responsibility to download and install new releases to ensure their software is kept up to date.

The design and functionality of the administration user interface and software APIs are within the control of Cantabular Ltd and we reserve ultimate decision making rights on this.

The design and functionality of our public web interface can be customised to meet the needs of individual customers. The level and nature of this customisation can be agreed on an individual basis. There are no plans to deprecate any features of Cantabular.

Service management

We typically provide bespoke support arrangements depending on the expertise of the customer. This can include remote email support, live support via chat software or video calls, on-site assistance and customisation.

We will work with you to develop and implement a service management plan suitable for your intended use of our software.

Planned and emergency maintenance

Our Private Cloud deployment model means that maintenance is under the customer's control.

Service levels

A separate service level agreement will be agreed between the customer and Cantabular Ltd and dependent on customer needs and working hours.

Training

Our software releases include comprehensive documentation of all features. This documentation is also available for download from Cantabular's administration user interface.

We include training in how to install Cantabular, load data into it and perform queries with the administration interface within the year one licence cost.

More detailed training on other aspects of the software and its use can be created as separate work packages.

Consumer responsibilities

The customer is responsible for supplying source data. Cantabular Ltd will provide training, as above, to help with loading and can also supply services to assist in transforming it into a suitable format for import into Cantabular. Additional customer responsibilities are outlined in the software terms and conditions.

Technical requirements

All Cantabular releases include binaries for both Linux and Windows servers as well as a development version for use on macOS. Cantabular web interfaces are designed to support the following browsers:

- Microsoft Edge
- Firefox
- Chrome
- Safari 9+
- Opera

Trial service

We can offer a trial version of the software to assist in assessing viability for the customer's data.